Health and Science Schools

Electronic Undergraduate Handbook 2016

Western Sydney University

Units, courses, and arrangements for courses as stated in the postgraduate and undergraduate electronic handbooks (and any other Western Sydney University publications or announcements) are an expression of intent only and are not to be taken as a firm offer or undertaking.

The University reserves the right to discontinue or vary its units, courses and announcements at any time without notice.

Information contained in this electronic handbook is correct at the time of production (April 2016), unless otherwise noted.

CRICOS Provider Code 00917K

In accordance with the Education Services for Overseas Students (ESOS) Act 2000, the University of Western Sydney is registered on the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS), Provider Code 00917K.

Overseas students studying in Australia must comply with the requirements of the ESOS Act and the National Code. They should consult the Federal Government's Australian International Education webpage for the description of the ESOS legislation and other relevant information. The University's International Postgraduate and Undergraduate Prospectuses, and other promotional material specifically prepared for overseas students, also provide information about CRICOS registered courses and conditions relating to study in Australia.

About the Health and Science Schools Electronic Undergraduate Handbook

Sessions and dates
There are two main sessions in 2016: Autumn and Spring. Weeks shown in the dateline refer to the session weeks for these main sessions.

The dateline is available at:
http://www.westernsydney.edu.au/currentstudents/current_students/dates/2016_academic_year_dateline.

Unit outlines
Brief outlines of units listed in the course section are given in the second half of this electronic handbook.

The unit outlines give a brief overview of each unit. For some units this information is not available. Please check the Western Sydney University website for more recent information. For more information – details of textbooks, assessment methods, tutorial, group work and practical requirements – contact the unit coordinator.

More information on unit offerings can be found at: http://handbook.westernsydney.edu.au/hbook/UNIT_SEARCH.ASP.

Unit not listed?
If the unit you are looking for is not in the alphabetical units section, consult your course coordinator for details or check the unit search web page for updated details on all units offered in 2016 at:
http://handbook.westernsydney.edu.au/hbook/UNIT_SEARCH.ASP.

Prerequisites, co-requisites and assumed knowledge
Students wishing to enrol in a unit for which they do not have the prerequisites or assumed knowledge are advised to discuss their proposed enrolment with an academic adviser.

Where it is necessary to limit the number of students who can enrol in a unit through shortage of space, equipment, library resources, and so on, or to meet safety requirements, preference will be given to students who have completed the unit recommended sequence in the course.

Academic credit
In most courses, academic credit will be granted for previous studies. For example, Western Sydney University has a number of agreements with TAFE to grant credit for successfully completed TAFE studies. Seek advice about credit prior to, or at enrolment.

Electives and cross-discipline study
Electives are available in many courses. These may be selected from pools of electives listed under various courses.

Western Sydney University also actively encourages students to take elective units in disciplines other than their major area of study. Students should seek advice from their course coordinator in the first instance.

How to use this electronic book
The first part of this electronic book contains information about current undergraduate courses offered by the Schools of Computing, Engineering & Mathematics, Medicine, Nursing and Midwifery, and Science & Health. The next part contains details of undergraduate specialisations in these courses, and the final part has details of all units within the courses.

The courses are arranged mainly alphabetically. If you know the course code, but not the name, consult the COURSE CODE INDEX.

The units are arranged alphabetically. If you know the code, but not the name, consult the UNIT CODE INDEX at the back of the electronic book.

Check website for updates
Every effort is taken to ensure that the information contained in this electronic book is correct at time of production. The latest information on course and unit offerings can be found at:
http://handbook.westernsydney.edu.au/hbook/

Contents

Western Sydney University

Western Sydney University

SCHOOL OF MEDICINE

Bachelor of Medical Research

4647.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencment year in this course is 2012 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course gives students who are enrolled in the Western Sydney University Bachelor of Medicine/Bachelor of Surgery (MBBS) the opportunity to take leave of absence from the normal medical course for 12 months full time or 24 months part time, after successfully completing Years 1 and 2 of MBBS, in order to gain a more detailed experience in medical research than is provided in the normal medical course. Years 1 and 2 of the Bachelor of Medical Research are identical to Years 1 and 2 of MBBS. It is expected that students will return to the medical course on completion of the intercalated year, which will complete the requirements for the Bachelor of Medical Research, but the degree is also available as an exit point for those who do not wish to resume MBBS.

Study Mode
Three years full-time or six years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal

Accreditation
The Australian Medical Council accredits the Bachelor of Medicine, Bachelor of Surgery (MBBS) program, and the addition of an extra year of research, as proposed here, meets one of their standards concerning provision of opportunities for research during medical courses.

Admission
Must be currently enrolled in Bachelor of Medicine/Bachelor of Surgery (MBBS) at UWS, and have successfully completed at least two years of that course, normally with a credit average, before being admitted to Year 3 of the intercalated Bachelor of Medical Research.

Course Structure
Qualification for this award requires the successful completion of 240 credit points, which include:

A common 160 credit point core, comprising the first two years of the Bachelor of Medicine / Bachelor of Surgery (MBBS) program

An 80 credit point intercalated program, specific to the new degree (Bachelor of Medical Research), which can be taken following the 2nd, 3rd or 4th year of the MBBS program, comprised of

A compulsory 60 credit point new unit, 400813 - Medical Research Project, and a choice of one of two existing course work combinations, totalling 20 credit points over two semesters, as shown below

Year 1

1H session (year long subjects)

400861.2	Foundations of Medicine 1

2H session

400861.2	Foundations of Medicine 1

Year 2

1H session (year long subjects)

400862.2	Foundations of Medicine 2

2H session

400862.2	Foundations of Medicine 2

Year 3

1H session

400813.2	Medical Research Project

Autumn session
Choose one of

300768.2	Methods of Scientific Researching
400864.3	Research Methods (Quantitative and Qualitative)

2H session

400813.2	Medical Research Project

Spring session
Choose one of

300768.2	Methods of Scientific Researching
400863.2	Foundations of Research and Evidence-Based Practice

Note: This program is available only to students who are selected into The University`s Bachelor of Medicine (MBBS) and Bachelor of Surgery; Years 1 and 2 of the Bachelor of Medical Research are identical to Years 1 and 2 of the MBBS program.

Note: Students may apply for leave of absence from MBBS (for one year full-time or two years part-time) and admission to the B Med Res once they have completed Years 1 and 2 of MBBS, and will normally be required to have a credit average in MBBS at the time they apply.

Note: Year 3 of the Bachelor of Medical Research will most commonly be undertaken between Years 2 and 3 or between Years 3 and 4 of the MBBS. It will not normally be

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 1

possible to enrol for the Bachelor of Medical Research once Year 5 of MBBS has been completed, because of the need for current clinical skills as the graduates progress into the following Intern year.

Bachelor of Medicine, Bachelor of Surgery

4641.5

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2015 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course prepares graduates for eligibility for registration as a medical practitioner in Australia or New Zealand. It is an integrated program in which the basic sciences and areas of knowledge underpinning medical practice are learnt in a framework that emphasises active learning, based on clinical and other relevant scenarios. Teaching of clinical skills begins in the first year and continues throughout the program. In the last three years of the course, students undertake clinical placements in a wide range of settings across Greater Western Sydney and beyond. Students who undertake the embedded Honours program during the final two years of the course will also carry out a research project.

Study Mode

Five years full-time. In the first two years of the course, students will study at the Campbelltown campus of the University. In the later years, students may be required to spend a period of time in one or more clinical rotations outside the Sydney metropolitan area, and will also be rotated to a substantial number of different locations within Sydney.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Advanced Standing

The course is extensively integrated horizontally, and as a result it will not be possible to grant credit for units taken in other courses.

Accreditation

The Bachelor of Medicine, Bachelor of Surgery (MBBS) program is fully accredited by the Australian Medical Council. Graduates will be eligible for registration as a medical practitioner by the Australian Health Practitioner Regulation Agency.

Inherent requirements

There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission

Potential students should apply through the Universities Admission Centre (UAC) and directly to the School of Medicine. Selection is on the basis of:

- Academic merit (ATAR or its equivalent, for those without a completed degree; grade point average in their most recent degree, for graduate applicants)
- Results of the Undergraduate Medicine and Health Sciences Admission Test (UMAT); and
- Performance at an interview.

Evidence of connection to Greater Western Sydney may also be taken into account.

The requirements for International applicants (who must apply via the University's International Office) to be considered for admission to the medical course are:

Achieve an academic rank of 95.5 or more (derived on submission of academic results) Meet English proficiency requirements.

- for those who have completed a 3 year or longer Bachelors degree, the grade point average in the degree must be at least 5.6 on the 7 point scale,
- For students commencing in 2015 - Achieve a scholastic performance in the final year of secondary school equivalent to a New South Wales ATAR of 95.50 (or 93.50 for applicants from Greater Western Sydney)(International Baccalaureate 37 or 36 for the Greater Western Sydney applicants) or higher.
- Have completed IELTS or equivalent examination (Academic Module) and achieve a minimum score of 7.0 in each of the four components, and an overall score of at least 7.0
- For more information on entry requirements and how to apply please see the School of Medicine web page.

For Honours Students:

Completion of Year 3 of Western Sydney University MBBS, with a grade-point average in the course to that time of 6.0 or better. Applications will be directly to the School, from currently enrolled students in Year 3 of MBBS.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Special Requirements

To be enrolled in this course students must comply with the current occupational screening and vaccination policy of NSW Health and meet NSW Clinconnect requirements at

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 2

course commencement. Student details will be registered with the Australian Health Practitioner Regulation Agency , and must successfully complete a Work Cover Authority approved First Aid Certificate prior to the completion of the first semester of the course. Also see inherent requirements section above. Travel Requirements: The main hospitals outside of the Sydney Metropolitan Area are Lismore and Bathurst, although clinical training at other rural hospitals may be required. The School will consider special circumstances of students when allocating them to hospitals on rotation. However, the School reserves the right to allocate students to hospitals that are not their first preference to ensure that students receive the highest possible quality of teaching. Applicants for entry into Western Sydney University Medicine must take this into consideration and be willing to undertake their training in a range of hospital and health care facilities.

Course Structure

Qualification for the award requires the successful completion of 400 credit points including the units listed in the sequence below.

Full-time

Year 1

1H Session

400861.2   Foundations of Medicine 1

2H Session

400861.2   Foundations of Medicine 1

Year 2

1H Session

400862.2   Foundations of Medicine 2

2H Session

400862.2   Foundations of Medicine 2

Year 3

1H Session

400810.3   Integrated Clinical Rotations 1

2H Session

400810.3   Integrated Clinical Rotations 1

Year 4

1H Session

400811.2   Integrated Clinical Rotations 2

2H Session

400811.2   Integrated Clinical Rotations 2

Year 5 (Non-Honours stream)

1H Session

400977.2   Integrated Clinical Rotations 3

2H session

400978.2   Integrated Clinical Rotations 4

Year 5 (Honours stream)

Honours Coordinator: Professor Phillipa Hay, e-mail MBBSHons@Western Sydney University.edu.au
Honours stream students will complete the following units

1H Session

400977.2   Integrated Clinical Rotations 3

2H session

400978.2   Integrated Clinical Rotations 4
401172.1   Honours Project (Medicine)

Unsatisfactory Completion of Core Units

Students who are unable to satisfy the requirements of the core unit 400977 Integrated Clinical Rotations 3 will be expected to enrol and complete the unit 400979 - Integrated Clinical Rotations (General). Students should seek immediate academic advice regarding their planned progression and pattern of enrolment, which may have to be varied to meet unit and course requirements.

400979.1   Integrated Clinical Rotations (General)

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated Guidelines for the admission criteria.

Bachelor of Medicine, Bachelor of Surgery/Bachelor of Arts

4671.3

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2015 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This combined program is offered to a small number of students (quota of three) who have demonstrated extremely high academic achievement during their Year 12 school studies, and who wish to broaden their medical studies by also completing the requirements for a Bachelor of Arts (BA). In addition to completing all components of the medical course, they will also complete 160 credit points of studies for the BA, one year of which will be taken off from the MBBS program to study 80 credit points of units for the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 3

BA full-time. Some students will choose to complete the program in seven years rather than six, in which case no overload would be needed. Students accepted into the combined program will need to consult with course advisors for both MBBS and BA to plan how to dovetail the commitments needed for each component course. Students should refer to the separate handbook entries for the component degrees.

Study Mode
Six years full-time if 80 credit points of Bachelor of Arts units taken in overload. Seven years full-time if no overload.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The Bachelor of Medicine, Bachelor of Surgery course is accredited by the Australian Medical Council.

Admission
The admissions requirements and processes will be the same as for the MBBS (including the requirements to apply directly to the School of Medicine by the September closing date each year, to have a current UMAT score, and to have taken part in the Schools Multi-mini Interview (MMI), but with the following differences:

- The ATAR (or its equivalent) cutoff for consideration for entry to this combined degree is 99.85
- There will be a quota of three places for the combined degree in the first instance (it is important to set a quota, since the NSW hospitals and IMET do their planning for Intern places based on a steady pipeline of graduates emerging from the NSW medical courses; the quota could be adjusted slowly in future years if the level of demand supports it).
- Up to ten places will be set aside for the MMI for applicants with the MBBS/BA UAC course code (i.e. The same ratio of interview places to actual course places as for the straight MBBS). If there are more than 10 eligible applicants, they will be ranked by their UMAT score.
- The final ranked selection list, for the UAC admissions process, will be based solely on the interview performance.

For more information on entry requirements and how to apply please see the School of Medicine web page.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
Qualification for the award requires the successful completion of 560 credit points including the units listed in the sequence below.

Students will take a year off from the MBBS program (ideally between Years 2 and 3 or between Years 3 and 4) to study BA full-time. Some students will prefer to take a second full-time year off to complete the 160 credit points of Arts units required for the BA, while others will request and be approved to carry a small overload (average of 10 credit points per semester) in Years 1-4 of MBBS to complete 80 credit points of Arts units.

A typical structure is set out below, but the overload (or decision to NOT overload) and the particular year in which a student would intercalate from the MBBS program can be tailored to individual students' needs.

Recommended Sequence

Full-time

Year 1
1H session

400861.2   Foundations of Medicine 1

and one 10 credit point Bachelor of Arts unit

2H Session

400861.2   Foundations of Medicine 1

and one 10 credit point Bachelor of Arts unit

Year 2

1H Session

400862.2   Foundations of Medicine 2

and one 10 credit point Bachelor of Arts core unit

2H Session

400862.2   Foundations of Medicine 2

and one 10 credit point Bachelor of Arts core unit

Year 3

400810.3   Integrated Clinical Rotations 1

and 20 credit points of Bachelor of Arts core units - 10 credit points per semester

Year 4

80 credit points of full-time Bachelor of Arts units

Year 5

400811.2   Integrated Clinical Rotations 2

and 20 credit points of Bachelor of Arts units - 10 credit points per semester

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 4

Year 6

400977.2   Integrated Clinical Rotations 3
400978.2   Integrated Clinical Rotations 4

(Bachelor of Arts requirements complete)

Bachelor of Arts Majors

Note: Not all majors are available on all campuses.

Note: Some majors and sub-majors have inherent requirements. Please check the information online.

M1059.1	Arabic
M1060.1	Chinese
M1052.1	Cultural and Social Analysis
M1053.1	English
M1054.1	History and Political Thought
M1041.1	Indigenous Australian Studies
M1093.1	Indonesian
M1055.1	International Relations and Asian Studies
M1056.1	Islamic Studies
M1062.1	Japanese
M1057.1	Linguistics
M1058.1	Philosophy
M1050.1	Psychological Studies

Bachelor of Arts Submajors

Note: Not all Arts sub-majors are available on all campuses.

SM1077.1	Arabic
SM1078.1	Chinese
SM1070.1	Cultural and Social Analysis
SM1071.1	English
SM1072.1	History and Political Thought
SM1049.1	Indigenous Australian Studies
SM1112.1	Indonesian
SM1073.1	International Relations and Asian Studies
SM1074.1	Islamic Studies
SM1080.1	Japanese
SM1075.1	Linguistics
SM1076.1	Philosophy
SM1069.1	Psychological Studies

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 5

Specialisations

Major - Indigenous Australian Studies

M1041.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows

Students must complete the following Level 1 unit

101751.2	Contextualising Indigenous Australia (Day Mode)

Choose seven of the following units including three Level 3 units

Level 1 units

101762.1	Who do you think you are? (Day Mode)
101878.1	Indigenous Landscapes

Level 2 units

101752.1	Pigments of the Imagination
101753.3	Revaluing Indigenous Economics (Day Mode)
101754.3	From Corroborees to Curtain Raisers (Day Mode)
101755.1	From Ochre to Acrylics to New Technologies

Level 3 units

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101757.1	The Making of the `Aborigines'
101758.2	Learning through Indigenous Australian Community Service (Day Mode)
101759.2	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)

Major - Psychological Studies

M1050.1

The Psychological Studies major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to enrol in an accredited Psychology sequence should complete the Psychology key program of 160 credit points.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete the following eight units

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
100013.3	Experimental Design and Analysis
101676.2	Human Learning
101680.3	Perception
101184.3	Psychology: Human Behaviour
101183.3	Psychology: Behavioural Science

Major - Cultural and Social Analysis

M1052.1

Cultural and Social Analysis is an interdisciplinary major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 6

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete the following units

100897.2	Everyday Life
101979.1	Understanding Visual Culture
101906.2	Researching Culture
102410.1	Digital Cultures

Plus four units from the following pools with no fewer than two Level 3 units in order to complete the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

102192.1	Cinema and Censorship
101967.1	Cultural History of Books and Reading
101250.3	Digital Futures
100964.3	Introduction to Film Studies
100882.3	Politics of Sex and Gender
101917.1	Representing Everyday Life in Literary and Visual Cultures
101990.1	The Racial State
101989.1	Thinking Cinema
100291.5	Urban Life/Urban Culture
100298.3	Youth Cultures and Moral Panics

Level 3 Unit Pool - Choose at least two

101981.1	Activism, Engagement and Social Change
101265.3	Children's Culture
101626.5	Children's Literature: Image and Text
101870.1	Climate Change and Culture
101984.1	Cinema and Experience
102185.1	Culture, Discourse and Meaning
100996.3	Death and Culture
100860.3	Emotions, Culture and Community
100866.3	Film and Drama
102305.1	Food: Its History and Sustainability
101716.3	Healing and Culture
101991.1	History of Sexuality
101988.1	Human Rights and Culture
100961.4	Humanities Internship
101468.2	Islam, Media and Conflict
101985.1	Politics, Power and Resistance
101987.1	Postcolonial Australian Cinema
101253.3	Public Memory and Commemoration
102191.1	Queer Culture
101005.4	Representing Crime
101738.2	The Art Game: Fraud, Forgery, Theft and Perfidy
101009.3	The Body in Culture
101731.3	Understanding Power
101898.1	Violence in Everyday Life
101010.3	What is the Human?

Please note:

The Level 2 and level 3 units listed below count towards completion of the major for students who may have passed units in the list below in 2015 or earlier.

Level 2 units

101409 - Aboriginal Cultural Texts

101408 - Critical Discourse Analysis

100854 - Contemporary Popular Cultures

SS238A - Genres

101251 - Introduction to Psychoanalysis

100273 - New Ethnicities, Old Racisms

G2006 - Race, Community and National Identity in Australia

100884 - Social Inequalities

100886 - Special Topics in Cultural and Social Analysis

100889 - Technocultures

10371 - The Art Museum-from the Prince to the Public

101411 - Theories of Representation

101879 - Women with Muslim Identity

Level 3 units

101295 - Aesthetics

400087 - Applied Critical Methods

100988 - Chaos and Communication

100990 - Cinema, Culture, Memory

100992 - Communication: Power and Practice

100994 - Consumer Culture

100858 - Culture and Globalisation

100998 - Evolutionary Thinking

101844 - Feminist Theories

100999 - Gender at Work

101955 - Honours Foundation

101739 - Literature and Trauma

101732 - Media, The Everyday and Uneven Modernities

101800 - Media, Violence, Protest, Terror

101252 - Psychoanalytic Criticism

101003 - Religion and Culture

101006 - Social Semiotics

101007 - Story Links and Indigenous Knowledge

101832 - Talking Normal: Sociolinguistics and Modern Literature

101008 - Technologies of Racism

101848 - Transnationalism and Migration

101798 - Understanding Freedom

Major - English

M1053.1

The English major invites students to explore contemporary approaches to language, literary study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. The English major focuses on the imaginative workings of language,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 7

and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must successfully complete 80 credit points with no less than three Level 3 units.

Students must complete the following compulsory units

101907.1	Introduction to Literary Studies
100641.3	Approaches to Text
101909.1	Methods of Reading
101976.2	English Literature After 1830

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100900.4	Comedy and Tragedy
101967.1	Cultural History of Books and Reading
100584.2	Experimental Writing and Electronic Publication
101986.1	International Texts and Contexts
100964.3	Introduction to Film Studies
101978.1	Modern Australian Poetry and Poetics
101917.1	Representing Everyday Life in Literary and Visual Cultures
101964.1	Sexual/Textual Politics in Victorian Women's Writing
100505.2	Special Topics in English, Text and Writing
101869.1	Studies in Postcolonial Literature
101795.3	The Musical
100896.3	Writing Fiction

Level 3 Unit Pool

101796.1	19th Century American Literature
102099.1	20th Century American Literature
100849.4	Australian Textual Studies
102205.1	Children's and Young Adult Fiction
101626.5	Children's Literature: Image and Text
101984.1	Cinema and Experience
100856.4	Creative Non-Fiction
100859.3	Creative Writing Project
102315.1	Crime Fiction
102185.1	Culture, Discourse and Meaning
100256.4	Film and Affect
100866.3	Film and Drama
102186.1	Introduction to Stylistics
100875.4	Literature and Philosophy
101739.3	Literature and Trauma
101966.1	Literatures of Decolonisation
101033.4	Modernism

101001.3	Modernity and Cinema
101650.3	Race in Literature
102078.1	Reading Ireland in the 1990s: Fiction, Poetry, Drama
101005.4	Representing Crime
101791.2	Short Fiction in the Americas
101832.2	Talking Normal: Sociolinguistics and Modern Literature
100893.4	The Novel
101880.1	The Space of Literature
101977.1	Women, Travel and Empire
102374.1	Women's Writing
101669.3	World Literature in Translation
101908.1	Writing and Reading Sci Fi and Fantasy
101670.3	Writing and Society
100895.4	Writing For Performance
101011.3	Writing Poetry
100582.2	Writing Portfolio

Please note:

The Level 2 and level 3 units listed below count towards completion of the major for students who may have passed units in the list in 2015 or earlier.

Level 2

101408 - Critical Discourse Analysis

100993 - Constructions of the Script

101452 - History of the English Language

100870 - Hypertext Fictions

SS238A - Genres

100880 - Poetry and Poetics

101873 - The Sound of Language

101455 - The Structure of English

Level 3

100845 - American Literature

400087 - Applied Critical Methods

101242 - Childrens Literature

101000 - hom/e/scapes

101955 - Honours Foundation

101724 - Literary Animals

100874 - Literature, History and Culture

101406 - Queering Text

101006 - Social Semiotics

101453 - Text and Discourse in English

101668 - World Cinema

101471 - Women in Arabic and Islamic Literature

Major - History and Political Thought

M1054.1

Since the revival of humanist thought in the Renaissance, universities have placed studies in history and political thought at the centre of exploring what it is to be human. At the heart of the History and Political Thought major are four compulsory units which introduce the student to the modern (since 1500) history of humanity. Although Europe is very prominent in the Major, the student will be invited to

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 8

compare its history to the histories of Asia, Africa and the Americas. The Major culminates in a capstone unit in students' final semester discussing historical theories and methods. This will also provide an introduction to the Honours program for students who wish to pursue further studies and research. A wide range of elective units covers European, American, Australian and Asian history and political thought and includes thematic units which range widely over time and place.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must successfully complete 80 credit points from the units listed below, with no less than three Level 3 units.

Students must complete the following compulsory units

101910.1	Global History
102000.1	Modern European History and Politics
101992.1	Religion and the Emergence of Modern Politics
102001.1	Theories and Methods of History

Level 2 Unit Pool

Note: Not all level 2 and 3 pool units will be offered each year. Units will be offered on a rotational basis.

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
101973.1	Australian Politics
101967.1	Cultural History of Books and Reading
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100001.3	Keeping the Past
101843.2	Philosophy and Environment
101797.2	Political Terror
100882.3	Politics of Sex and Gender
101992.1	Religion and the Emergence of Modern Politics
102002.1	Religion and the Origins of Modern Science
101867.2	The Ethical Life
101294.3	The Western Philosophical Tradition
101871.2	War
101912.1	Western Political Philosophy

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
100966.3	American History, 1898-1945
102004.1	Australian Colonial History
100987.3	Australian History Since 1920
101872.1	Australian Indigenous History from Federation to Reconciliation
101919.1	Australian Indigenous History: From first contact to 'dying race'
102079.1	Britain in the Age of Botany Bay, 1760-1815
102003.1	Comparative Nationalism
101799.2	Convicts and Settlers - Australian History 1788 - 1840

100903.2	Democracy in Asia
102188.1	Dictators, Democrats and Dreamers: Indonesia 1942 to now
101974.1	Enlightenment and Revolution
102007.1	Ethics in Historical Perspective
100254.3	Exploring Local History
102305.1	Food: Its History and Sustainability
101735.2	Global Politics
102006.2	Histories of Crime and Punishment
101991.1	History of Sexuality
100507.4	History of Modern China to 1949
102184.1	History of Muslim Civilisations and Ideas
100961.4	Humanities Internship
101988.1	Human Rights and Culture
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
102343.1	Napoleon: the Making of a Legend
100278.2	Politics of Post-War Japan
101985.1	Politics, Power and Resistance
63178.2	Social and Political Developments in Contemporary China
102187.1	Sultans, Colonists and Nationalists: Indonesia C1200-1942
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
102005.1	The Politics of Civilisation
101913.1	Theories of Authority
100969.2	Theories of Conflict and Violence
102001.1	Theories and Methods of History
101999.1	Twentieth Century Australia
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101993.1	War and Society in the Twentieth Century
102142.1	Warlords, Artists and Emperors: Power and Authority in Japanese History
101830.2	WWII in Asia and the Pacific
101010.3	What is the Human?

Please note:

The Level 2 and level 3 units listed below count towards completion of the major for students who may have passed units in the list in 2015 or earlier.

Level 2

100248 - Australian Labour History

101407 - Britain 1500-1800: Before Botany Bay

102079 - Britain in the Age of Botany Bay, c1770-1840

100852 - Classics of Modern Philosophy

100853 - Contemporary Australia

100869 - Foundations of Modern Europe 1500-1800

101543 - India: Global Contexts

100262 - India: History in the Making of a Nation

100878 - Meanings of a Commonwealth - English Political Ideas 1500-1800

100904 - Politics and Business in Asia

100277 - Politics of Australia and Asia Relations

63111 - Special Topics in Asian and International Studies

101972 - The History of Modern Indonesia

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 9

100892 - The Westminster System: England's Constitutional Culture

Level 3

101295 - Aesthetics

100957 - Alternative Histories: The State and Civil Society in Australian History

100991 - Citizenship Ancient and Modern

100992 - Communication: Power and Practice

101249 - Culture and Thought in Twentieth-Century China

100860 - Emotions, Culture and Community

100863 - Ethical Cultures

100864 - Europe in the Twentieth Century

101844 - Feminist Theories

101674 - Global Histories of Food

100963 - Interpreting Australia: Australian Historians and Historiography

101801 - Interpreting Fascism

101823 - Lay Participation in Justice Processes (replaced by 102006)

100275 - Philosophies of Love and Death

100879 - Philosophy Today

101665 - Politics and Religion (replaced by 101913)

100908 - Race Politics

100284 - Special Topics in Australian History

100887 - Sport and Australian History

101667 - The External Relations of the European Union

101405 - The Politics of Contemporary Indonesia

101831 - Transport and the Making of the Modern World

101375 - War and Peace

100971 - Which New World Order?

100894 - World War 1

Major - International Relations and Asian Studies

M1055.1

This major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study contemporary Asia, as well as the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The major area also includes a range of units concerned with the United States and Europe as well as with Asia itself, and units in international relations covering other parts of the world. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Students are encouraged to undertake a sub-major in an Asian language in conjunction with the major. Employment opportunities may be found in the State and

Commonwealth public service, overseas organisations, the media, business and industry, education and research.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete the following compulsory units

101442.2	Asia in the World
101956.1	Introduction to International Relations
100277.4	Politics of Australia and Asia Relations
101957.2	The Asian Century

And four units from the following pools, with no less than three Level 3 units in order to pass the major.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
101968.1	Civil Society in Contemporary China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101797.2	Political Terror
101871.2	War

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
100903.2	Democracy in Asia
102188.1	Dictators, Democrats and Dreamers: Indonesia 1942 to now
101735.2	Global Politics
100507.4	History of Modern China to 1949
100961.4	Humanities Internship
102189.1	International Organisations and Global Governance
102190.1	International Relations of Southeast Asia
102193.1	International Special Study
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
102187.1	Sultans, Colonists and Nationalists: Indonesia C1200-1942
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
102005.1	The Politics of Civilisation
101866.1	United States Government and Politics
102142.1	Warlords, Artists and Emperors: Power and Authority in Japanese History
101830.2	WWII in Asia and the Pacific

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 10

Please note:

The units listed below count towards completion of the major for students who may have passed units in the list in 2015 or earlier.

101737 - World Politics: An Introduction (Level 1)

Level 2

100872 - Asia and the West: the Imperial Encounter

100245 - Asian Cinema

100850 - Buddhism in the Contemporary World

100855 - Contemporary Japan: Culture and Society

101857 - Doing Business in China

100262 - India: History in the Making of a Nation

100847 - International Politics of North Asia

100904 - Politics and Business in Asia

63111 - Special Topics in Asian and International Studies

101972 - The History of Modern Indonesia

Level 3

400087 - Applied Critical Methods

101249 - Culture and Thought in Twentieth Century China

100962 - International Politics of the South East Asia Region

101667 - The External Relations of the European Union

101963 - Understanding Global Insecurity

101375 - War and Peace

100971 - Which New World Order?

Major - Islamic Studies

M1056.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches. Students are encouraged to undertake a sub-major in Arabic to complement the Islamic Studies major.

Location

Campus	Mode
Bankstown Campus	Internal

Specialisation Structure

Students must successfully complete 80 credit points from the units listed below, with no less than three level 3 units.

Students must complete the following four compulsory units:

| 102296.1 | Hadith: The Prophetic Tradition |
| 101465.2 | Islamic Law in a Changing World |

| 101911.2 | The Qur'an: An Introduction |
| 101462.2 | Understanding Islam and Muslim Societies |

The remaining four units must be drawn from the following level 2 and 3 unit pools

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 units

| 101463.4 | Islam in the Modern World |
| 101879.2 | Women with Muslim Identity |

Level 3 Units

101466.2	Ethical Traditions in Islam
102184.1	History of Muslim Civilisations and Ideas
101822.3	Islam in the West
101467.2	Islam in Southeast Asia
101468.2	Islam, Media and Conflict
102297.1	Islamic Revivalism in the Globalised World
101359.5	Sociology of Religion
101783.2	The International Relations of the Middle East Since 1945

Please note:

The Level 2 and level 3 units listed below count towards completion of the major for students who passed any of these units in 2015 or earlier.

Level 2

101464 - Great Texts of Islam: Quran and Hadith

100273 - New Ethnicities, Old Racisms

Level 3

101688 - Anthropology of Religion

400087 - Applied Critical Methods

100961 - Humanities Internship

100877 - Multicultural Studies

101792 - Texts in Contemporary Arab Society and Culture

101471 - Women in Arabic and Islamic Literature

Major - Linguistics

M1057.1

Language is fundamental to the human experience. Through study of how language works, students make contact with fundamental philosophical, socio-cultural, and psychological questions about what it means to be human. Linguistics prepares students with a foundation for many careers including primary and secondary teaching, policy analysis, communication, and social services in culturally diverse communities. Linguistics students also gain the analytical tools of empirical science including the ability to break complex problems into components with tractable solutions and to evaluate theories on the basis of empirical facts. These skills prepare students for success in post-graduate studies and careers in research, analytics, business and law.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 11

Location

Campus	Mode
Bankstown Campus	Internal

Specialisation Structure

Students must complete the following compulsory units

101945.2	Introduction to Linguistics
102042.1	The Sound of Language
101948.2	Structure of Language
101947.1	Pragmatics
101449.2	Bilingualism and Biculturalism
101451.2	Second Language Acquisition

And students must complete two of the following pool units

Level 3 Unit Pool

101946.1	Discourse Analysis
102043.1	Historical Linguistics
101950.1	Intercultural Communication
100023.5	Psychology of Language
102044.1	Research Methods in Linguistics
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics

Please note:

The level 2 and level 3 units listed below count towards completion of the major for students who passed any of these units in 2015 or earlier.

Level 2

100194 - Introduction to Interpreting - [level 1]

100195 - Introduction to Translation - [level 1]

Level 3

400087 - Applied Critical Methods

101441 - English Semantics and Pragmatics

101454 - Intercultural Pragmatics

101709 - Languages and Grammatical Concepts 3A: Arabic

101710 - Languages and Grammatical Concepts 3A: Chinese

101711 - Languages and Grammatical Concepts 3A: Italian

101712 - Languages and Grammatical Concepts 3A: Japanese

101713 - Languages and Grammatical Concepts 3A: Spanish

101721 - Second Language Learning and Teaching

101832 - Talking Normal: Sociolinguistics and Modern Literature

101453 - Text and Discourse in English

Major - Philosophy

M1058.1

Philosophy has always asked the "big questions" about our lives. These are questions, for example, about the limits of our knowledge, the best way that humans can live together, how we understand the world around us, and what is the good life. A philosophy major will enable students to develop particular skills and attributes - such as clear thinking, capacities to assess arguments and values, sound understanding of important philosophical views that have always been essential to university scholarship, and which continue to be valuable for graduates in both public and private life.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete the following compulsory units

101918.1	Introduction to Philosophy
101915.1	Ethics and Philosophy
101914.1	Case Studies in Philosophy: Thinker
101916.1	Case Studies in Philosophy: Text

Plus four units from the following pools with no fewer than two Level 3 units.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Pool Units

100244.2	Ancient Western Culture: Periclean Athens
100852.2	Classics of Modern Philosophy
101881.2	Philosophy and the Good Life
101867.2	The Ethical Life
101989.1	Thinking Cinema
101983.1	Truth and Knowledge
101912.1	Western Political Philosophy

Level 3 Pool Units - Choose at least two

101295.2	Aesthetics
102007.1	Ethics in Historical Perspective
101844.2	Feminist Theories
100961.4	Humanities Internship
100875.4	Literature and Philosophy
102417.1	Philosophy and Environment
100275.4	Philosophies of Love and Death
101965.1	Philosophy of Religion
100969.2	Theories of Conflict and Violence
101913.1	Theories of Authority
101798.2	Understanding Freedom
101731.3	Understanding Power
101010.3	What is the Human?

Please note:

The Level 2 listed below count towards completion of the major for students who may have passed units in the list in 2015 or earlier.

Level 2

101843 - Philosophy and Environment

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 12

Major - Arabic

M1059.1

Language specialisations aim to enable students to develop an appropriate level of proficiency in a second language, which may be used for professional purposes such as teaching, interpreting and translation, business or international relations. Students undertaking a language specialisation will be able to use the language in question according to its grammatical and pragmatic principles, communicate with native speakers appropriately in the spoken as well as the written mode, and demonstrate an understanding of the cultures and societies associated with the language.

Location

Campus	Mode
Bankstown Campus	Internal

Specialisation Structure

There are three entry levels into language majors. Beginner's level is for those with no previous study or minimal study of the language. Intermediate level is typically for students who: are non-native speakers with study of the language to HSC 2 Unit level or have a home background in the language but no comprehensive formal study, or who speak a non-standard variety (e.g. dialect). Post-Intermediate level is typically for students who are non-native speakers with substantial formal study and near-native competence; or are literate native speakers of a standard variety. Students should consult with the Languages staff regarding the progression sequence that best fits their level of skill. During the first two weeks of class, the lecturer will monitor the performance of students and advise students who need to transfer to a higher or lower class. Students may consult with the Languages Academic Course Advisor, if they are unsure of their entry level. Students should avoid enrolling in units at different levels at the one time (e.g. you should not enrol in Arabic 201 and 301 at the same time). Please check the current timetable as some units may not be offered every year. Advanced (Level 3) units may be offered on a rotational basis.

A major in Arabic comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginner's level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 units

100041.2	Arabic 101

100042.2	Arabic 102

Level 2 units

102019.1	Arabic 201
102020.1	Arabic 202
102021.1	Arabic 203
102022.1	Arabic 204

Level 3 units

101949.2	Arabic 301
100048.2	Arabic 302 - Arabic Advanced Language and Grammar
100049.2	Arabic 303: Advanced Writing Skills
100050.2	Arabic 304: Arabic Advanced Speaking
100052.2	Arabic 306: Arabic Novel and Short Story
100054.2	Arabic 308:Language Past and Present
101950.1	Intercultural Communication
100201.2	Special Study in Languages and Linguistics

Please note:

The level 2 and 3 units listed below count towards completion of the major for students who may have passed units in the list below in 2015 or earlier.

100051 - Arabic 305: Arabic Contemporary Poetry

101454 - Intercultural Pragmatics

101699 - Language and Communication Skills 2A: Arabic

101704 - Language and Communication Skills 2B: Arabic

101709 - Languages and Grammatical Concepts 3A: Arabic

101792 - Texts in Contemporary Arab Society and Culture

101668 - World Cinema

Major - Chinese

M1060.1

Language majors aim to enable students to develop an appropriate level of proficiency in a second language which may be used for professional purposes such as teaching, interpreting and translation, business or international relations. Students undertaking a language major will be able to use the language in question according to its grammatical and pragmatic principles, communicate with native speakers appropriately in the spoken as well as the written mode, and demonstrate an understanding of the cultures and societies associated with the language.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

There are Inherent Requirements for this major, please check the information online.

There are three entry levels into language majors. Beginner's level is for those with no previous study or minimal study of the language. Intermediate level is

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 13

typically for students who: are non-native speakers with study of the language to HSC 2 Unit level or have a home background in the language but no comprehensive formal study, or who speak a non-standard variety (eg dialect). Post-Intermediate level is typically for students who are non-native speakers with substantial formal study and near-native competence; or are literate native speakers of a standard variety. Students should consult with the Languages staff regarding the progression sequence that best fits their level of skill. During the first two weeks of class, the lecturer will monitor the performance of students and advise students who need to transfer to a higher or lower class. Students may consult with the Languages Course Advisor, if they are unsure of their entry level. Students should avoid enrolling in units at different levels at the one time (eg: you should not enrol in Chinese 201 and 301 at the same time). Please check the current timetable as some units may not be offered every year. Advanced (Level 3) units may be offered on a rotational basis.

A major in Chinese comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginners level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 units

| 100056.2 | Chinese 101 |
| 100057.2 | Chinese 102 |

Level 2 units

102024.1	Chinese 201
102025.1	Chinese 202
102026.1	Chinese 203
102027.1	Chinese 204

Level 3 units

101951.1	Chinese 301
100063.2	Chinese 302
100064.2	Chinese 303: Twentieth-Century Chinese Literature
100065.2	Chinese 304: Chinese Classical Literature
100066.2	Chinese 305: Chinese Cinema
100510.2	Chinese 306: Traditional Chinese Thought
100067.2	Chinese 307: The Cultural Context of China
101950.1	Intercultural Communication
100201.2	Special Study in Languages and Linguistics

Please note:

The level 2 and level 3 units listed below count towards completion of the major for students who may have passed units in the list below in 2015 or earlier.

400087- Applied Critical Methods

101454 - International Pragmatics

101710 - Languages and Grammatical Concepts 3A: Chinese

101668 - World Cinema

Major - Japanese

M1062.1

Language majors aim to enable students to develop an appropriate level of proficiency in a second language which may be used for professional purposes such as teaching, interpreting and translation, business or international relations. Students undertaking a language major will be able to use the language in question according to its grammatical and pragmatic principles, communicate with native speakers appropriately in the spoken as well as the written mode, and demonstrate an understanding of the cultures and societies associated with the language.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

There are Inherent Requirements for this major, pleasecheck the information online.

There are three entry levels into language majors. Beginner's level is for those with no previous study or minimal study of the language. Intermediate level is typically for students who: are non-native speakers with study of the language to HSC 2 Unit level or have a home background in the language but no comprehensive formal study. Post-Intermediate level is typically for students who are non-native speakers with substantial formal study and near-native competence; or are literate native speakers of the language. Students should consult with the Languages staff regarding the progression sequence that best fits their level of skill. During the first two weeks of class, the lecturer will monitor the performance of students and advise students who need to transfer to a higher or lower class. Students may consult with the Languages Course Advisor, if they are unsure of their entry level. Students should avoid enrolling in units at different levels at the one time (e.g. you should not enrol in Japanese 201 and 301 at the same time). Please check the current timetable as some units may not be offered every year. Advanced (Level 3) units may be offered on a rotational basis.

A major in Japanese comprises a sequence of 80 credit points with 60 credit points at Levels 2 and 3 (with no less than 30 credit points of these at Level 3), however students commencing at beginners level, that is units 101 and 102, and who follow the recommended course structure, are only required to complete 20 credit points at Level 3.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 14

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 units

100085.2	Japanese 101
100086.2	Japanese 102

Level 2 units

102028.1	Japanese 201
102029.1	Japanese 202 Speaking and Listening
102030.1	Japanese 203
102031.1	Japanese 204

Level 3 units

101952.1	Japanese 301
100092.3	Japanese 302
100093.2	Japanese 303: Contemporary Culture and Society
101970.1	Japanese 304: Discourse in Japanese
101971.1	Japanese 305: Advanced Reading and Writing
102219.1	Japanese 306: Japanese Popular Culture
101950.1	Intercultural Communication
100201.2	Special Study in Languages and Linguistics

Please note:

The Level 3 units listed below count towards completion of the major for students who may have passed units in the list below in 2015 or earlier.

400087 - Applied Critical Methods

101454 - Intercultural Pragmatics

100096 - Japanese 306: Japanese for Business

100098 - Japanese 308: Japanese Textual Studies

101668 - World Cinema

101669 - World Literature in Translation

Major - Indonesian

M1093.1

Language specialisations aim to enable students to develop an appropriate level of proficiency in a second language, which may be used for professional purposes such as teaching, interpreting and translation, business or international relations. Students undertaking a language specialisation will be able to use the language in question according to its grammatical and pragmatic principles, communicate with native speakers appropriately in the spoken as well as the written mode, and demonstrate an understanding of the cultures and societies associated with the language.

Location

Campus	Mode
Bankstown Campus	Internal

Specialisation Structure

There are three entry levels into language specialisations. Beginner's level is for those with no previous study or minimal study of the language. Intermediate level is typically for students who: are non-native speakers with study of the language to HSC 2 Unit level or have a home background in the language but no comprehensive formal study, or who speak a non-standard variety (e.g. dialect). Post-Intermediate level is typically for students who are non-native speakers with substantial formal study and near-native competence; or are literate native speakers of a standard variety. Students should consult with the Languages staff regarding the progression sequence that best fits their level of skill. During the first two weeks of class, the lecturer will monitor the performance of students and advise students who need to transfer to a higher or lower class. Students may consult with the Languages Academic Course Advisor, if they are unsure of their entry level. Students should avoid enrolling in units at different levels at the one time (e.g. you should not enrol in Indonesian 201 and 301 at the same time). Please check the current timetable as some units may not be offered every year. Advanced (Level 3) units may be offered on a rotational basis.

A specialisation in Indonesian comprises a sequence of 80 credit points with 60 credit points at Level 2 and 3 (with no less than 30 credit points of these at Level 3).

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 units

102316.1	Indonesian 101
102326.1	Indonesian 102

Level 2 units

102319.1	Indonesian 201
102327.1	Indonesian 202

Level 3 units

102320.1	Indonesian 301: Indonesian for Academic Purposes
102328.1	Indonesian 302: Indonesian for Professional Purposes
102329.1	Indonesian 303: Indonesian for Business
102330.1	Indonesian 304: Contemporary Indonesia
102331.1	Indonesian 305: Past and Present of Indonesian
102332.1	Indonesian 306: Indonesian Literature
101950.1	Intercultural Communication
100201.2	Special Study in Languages and Linguistics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 15

Sub-major - Indigenous Australian Studies

SM1049.1

What does it mean to live in Indigenous Australia? The Indigenous Australian Studies Major and sub-majors offers students the exciting opportunity to acquire key cultural competencies that will enable them to understand and work more effectively with Indigenous Australians in professions such as the arts, communications, media industries; education; government and non-government; policy; health; sciences; and community services. The Indigenous Australian Studies Major and sub-majors addresses the cultural, historical, social and economic issues affecting Indigenous and Non-Indigenous Australians and relationships.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows

101756.1	Bridging the Gap: Re-engaging Indigenous Learners
101751.2	Contextualising Indigenous Australia (Day Mode)
101752.1	Pigments of the Imagination

Choose one of

101758.2	Learning through Indigenous Australian Community Service (Day Mode)
101759.2	Rethinking Research with Indigenous Australians: Independent Study Project (Day Mode)
101757.1	The Making of the `Aborigines'

Sub-major - Psychological Studies

SM1069.1

The Psychological Studies sub-major comprises units in the discipline of psychology that focus on the field of inquiry that uses scientific techniques and methods to understand and explain behaviour and experience. Units in the program are drawn from the following core areas of psychology: brain and behaviour, learning, motivation and emotion, social psychology, lifespan development, perception, and cognitive processes. A Psychological Studies sub-major does not meet APAC requirements for an accredited sequence in Psychology. Students wishing to enrol in an accredited Psychology sequence should complete the Psychology key program of 200 credit points.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Specialisation Structure

This sub-major is restricted to students enrolled in - 1604 Bachelor of Arts, 1706 Bachelor of Arts, 1652 Bachelor of Arts (Pathway to Teaching Secondary), or 1655 Bachelor of Arts (Dean`s Scholars).

Students must complete 40 credit points as follows, to be eligible for the submajor.

Students must pass three compulsory foundation units:

100013.3	Experimental Design and Analysis
101183.3	Psychology: Behavioural Science
101184.3	Psychology: Human Behaviour

And choose one of

101684.3	Brain and Behaviour
101677.3	Cognitive Processes
101682.4	Developmental Psychology
101676.2	Human Learning
101680.3	Perception

Sub-major - Cultural and Social Analysis

SM1070.1

Cultural and Social Analysis is an interdisciplinary sub-major developing knowledge, research skills and analytic capacities relevant to understanding and interpreting landscapes of cultural diversity and social difference in our contemporary world, both in terms of the broad contours, as well as specific micro-social environments. This sub-major provides grounding in contemporary debates and methodologies in cultural studies and social theory, and draws on various disciplines including history, sociology, communications, and linguistics. Topics include popular culture, everyday urban life, cultural and social impacts of scientific theories and new technologies, multiculturalism, and contemporary spirituality. Study in this area is relevant for work involving commentary and analysis of contemporary social issues and cultural practices (e.g. journalism, teaching, activism) and fields concerned with designing, delivering and evaluating cultural and artistic productions, and education, communication, welfare or health services, in culturally diverse communities.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 16

Specialisation Structure

To complete a sub-major in Cultural and Social Analysis, students must complete 40 credit points. At least two units must come from the following four units:

100897.2   Everyday Life
101979.1   Understanding Visual Culture
101906.2   Researching Culture
102410.1   Digital Cultures

Additional units to complete the sub-major can be chosen from the above four units, or from the following pool units.

Note: Not all Units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

102192.1   Cinema and Censorship
101967.1   Cultural History of Books and Reading
101250.3   Digital Futures
101986.1   International Texts and Contexts
100964.3   Introduction to Film Studies
100882.3   Politics of Sex and Gender
101917.1   Representing Everyday Life in Literary and
            Visual Cultures
101867.2   The Ethical Life
101990.1   The Racial State
101989.1   Thinking Cinema
100291.5   Urban Life/Urban Culture
100298.3   Youth Cultures and Moral Panics

Level 3 Unit Pool

101981.1   Activism, Engagement and Social Change
101265.3   Children's Culture
101626.5   Children's Literature: Image and Text
101870.1   Climate Change and Culture
101984.1   Cinema and Experience
102185.1   Culture, Discourse and Meaning
100996.3   Death and Culture
100860.3   Emotions, Culture and Community
100866.3   Film and Drama
102305.1   Food: Its History and Sustainability
101716.3   Healing and Culture
101991.1   History of Sexuality
101988.1   Human Rights and Culture
101468.2   Islam, Media and Conflict
101985.1   Politics, Power and Resistance
101987.1   Postcolonial Australian Cinema
101253.3   Public Memory and Commemoration
102191.1   Queer Culture
101005.4   Representing Crime
101738.2   The Art Game: Fraud, Forgery, Theft and
            Perfidy
101009.3   The Body in Culture
101731.3   Understanding Power
101898.1   Violence in Everyday Life
101010.3   What is the Human?

Please note:

The Level 2 and level 3 units listed below count towards completion of the sub-major for students who may have passed units in the list in 2015 or earlier.

Level 2 units

101409 - Aboriginal Cultural Texts

101408 - Critical Discourse Analysis
100845 - Contemporary Popular Cultures
SS238A - Genres
101251 - Introduction to Psychoanalysis
100273 - New Ethnicities, Old Racisms
G2006 - Race, Community and National Identity in Australia
100884 - Social Inequalities
100886 - Special Topics in Cultural and Social Analysis
100889 - Technocultures
10371 - The Art Museum-from the Prince to the Public
101411 - Theories of Representation
101879 - Women with Muslim Identity

Level 3 units

101295 - Aesthetics
400087 - Applied Critical Methods
100988 - Chaos and Communication
100990 - Cinema, Culture, Memory
100992 - Communication: Power and Practice
100994 - Consumer Culture
100858 - Culture and Globalisation
100998 - Evolutionary Thinking
101844 - Feminist Theories
100999 - Gender at Work
101739 - Literature and Trauma
101732 - Media, The Everyday and Uneven Modernities
101800 - Media, Violence, Protest, Terror
101252 - Psychoanalytic Criticism
101003 - Religion and Culture
101006 - Social Semiotics
101007 - Story Links and Indigenous Knowledge
101832 - Talking Normal: Sociolinguistics and Modern Literature
101008 - Technologies of Racism
101848 - Transnationalism and Migration
101798 - Understanding Freedom

Sub-major - English

SM1071.1

The English sub-major invites students to explore contemporary approaches to language, literary study and writing, including literary criticism and theory, linguistic analysis, genre and textual study, and creative writing. The English sub-major focuses on the imaginative workings of language, and students can study a wide selection of modern and classic literature, as well as the relationships between written texts and other media such as film and information technology. Students also have the opportunity to produce their own creative writing and to edit and publish their work. Career prospects include publishing, editing, teaching, writing and advertising.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 17

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

To complete a sub-major in English, students must complete 40 credit points from the units listed below.

Choose at least two of the following four units

101907.1	Introduction to Literary Studies
100641.3	Approaches to Text
101909.1	Methods of Reading
101976.2	English Literature After 1830

Additional units to complete the sub-major can be chosen from the above four units, or from the following pool units.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100900.4	Comedy and Tragedy
101967.1	Cultural History of Books and Reading
101986.1	International Texts and Contexts
100964.3	Introduction to Film Studies
101978.1	Modern Australian Poetry and Poetics
101917.1	Representing Everyday Life in Literary and Visual Cultures
101964.1	Sexual/Textual Politics in Victorian Women's Writing
101869.1	Studies in Postcolonial Literature
101795.3	The Musical
100896.3	Writing Fiction

Level 3 Unit Pool

100849.4	Australian Textual Studies
102205.1	Children's and Young Adult Fiction
101626.5	Children's Literature: Image and Text
101984.1	Cinema and Experience
100856.4	Creative Non-Fiction
100859.3	Creative Writing Project
102315.1	Crime Fiction
102185.1	Culture, Discourse and Meaning
100866.3	Film and Drama
100961.4	Humanities Internship
100875.4	Literature and Philosophy
101739.3	Literature and Trauma
101966.1	Literatures of Decolonisation
101033.4	Modernism
101650.3	Race in Literature
102078.1	Reading Ireland in the 1990s: Fiction, Poetry, Drama
101005.4	Representing Crime
101791.2	Short Fiction in the Americas
101832.2	Talking Normal: Sociolinguistics and Modern Literature
100893.4	The Novel
101880.1	The Space of Literature
101977.1	Women, Travel and Empire
102374.1	Women's Writing
101669.3	World Literature in Translation

101908.1	Writing and Reading Sci Fi and Fantasy
101670.3	Writing and Society
100895.4	Writing For Performance
101011.3	Writing Poetry
100582.2	Writing Portfolio
101796.1	19th Century American Literature
102099.1	20th Century American Literature

Please note:

The Level 2 and level 3 units listed below count towards completion of the sub-major for students who passed any of these units in 2015 or earlier.

Level 2

101408 - Critical Discourse Analysis

100993 - Constructions of the Script

101452 - History of the English Language

100870 - Hypertext Fictions

SS238A - Genres

100880 - Poetry and Poetics

101873 - The Sound of Language

101455 - The Structure of English

Level 3

100845 - American Literature

400087 - Applied Critical Methods

101242 - Childrens Literature

101000 - hom/e/scapes

101955 - Honours Foundation

101724 - Literary Animals

100874 - Literature, History and Culture

101406 - Queering Text

101006 - Social Semiotics

101453 - Text and Discourse in English

101668 - World Cinema

101471 - Women in Arabic and Islamic Literature

Sub-major - History and Political Thought

SM1072.1

Since the revival of humanist thought in the Renaissance, universities have placed studies in history and political thought at the centre of exploring what it is to be human. At the heart of the History and Political Thought sub-major are four compulsory units which introduce the student to the modern (since 1500) history of humanity. Although Europe is very prominent in the sub-major, the student will be invited to compare its history to the histories of Asia, Africa and the Americas. The Sub-major culminates in a capstone unit in students' final semester discussing historical theories and methods. This will also provide an introduction to the Honours program for students who wish to pursue further studies and research. A wide range of elective units covers European, American, Australian and Asian history and political thought and includes thematic units which range widely over time and place.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 18

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

To complete a sub-major in History and Political Thought, students must successfully complete 40 credit points from the units listed below.

Choose at least two of the following four units

101910.1	Global History
102000.1	Modern European History and Politics
101992.1	Religion and the Emergence of Modern Politics
102001.1	Theories and Methods of History

Additional units to complete the sub-major can be chosen from the above four units, or from the following Level 2 and 3 unit pools.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
100244.2	Ancient Western Culture: Periclean Athens
101973.1	Australian Politics
101967.1	Cultural History of Books and Reading
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
100001.3	Keeping the Past
101843.2	Philosophy and Environment
101797.2	Political Terror
100882.3	Politics of Sex and Gender
101992.1	Religion and the Emergence of Modern Politics
102002.1	Religion and the Origins of Modern Science
101867.2	The Ethical Life
101871.2	War
101912.1	Western Political Philosophy

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
100966.3	American History, 1898-1945
102004.1	Australian Colonial History
101872.1	Australian Indigenous History from Federation to Reconciliation
101919.1	Australian Indigenous History: From first contact to 'dying race'
102079.1	Britain in the Age of Botany Bay, 1760-1815
102003.1	Comparative Nationalism
101799.2	Convicts and Settlers - Australian History 1788 - 1840
100903.2	Democracy in Asia
102188.1	Dictators, Democrats and Dreamers: Indonesia 1942 to now
101974.1	Enlightenment and Revolution
102007.1	Ethics in Historical Perspective
100254.3	Exploring Local History
102305.1	Food: Its History and Sustainability
101735.2	Global Politics

102006.2	Histories of Crime and Punishment
101991.1	History of Sexuality
100507.4	History of Modern China to 1949
102184.1	History of Muslim Civilisations and Ideas
101988.1	Human Rights and Culture
100875.4	Literature and Philosophy
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
102343.1	Napoleon: the Making of a Legend
100278.2	Politics of Post-War Japan
101985.1	Politics, Power and Resistance
63178.2	Social and Political Developments in Contemporary China
102187.1	Sultans, Colonists and Nationalists: Indonesia C1200-1942
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
102005.1	The Politics of Civilisation
101913.1	Theories of Authority
100969.2	Theories of Conflict and Violence
102001.1	Theories and Methods of History
101999.1	Twentieth Century Australia
101798.2	Understanding Freedom
101731.3	Understanding Power
101866.1	United States Government and Politics
101993.1	War and Society in the Twentieth Century
102142.1	Warlords, Artists and Emperors: Power and Authority in Japanese History
101830.2	WWII in Asia and the Pacific
101010.3	What is the Human?

Please note:

The Level 2 and level 3 units listed below count towards completion of the sub-major for students who passed any of these units in 2015 or earlier.

Level 2 Units

100248 - Australian Labour History

101407 - Britain 1500-1800: Before Botany Bay

102079 - Britain in the Age of Botany Bay, c1770-1840

100852 - Classics of Modern Philosophy

100853 - Contemporary Australia

100869 - Foundations of Modern Europe 1500-1800

101543 - India: Global Contexts

100262 - India: History in the Making of a Nation

100878 - Meanings of a Commonwealth - English Political Ideas 1500-1800

100904 - Politics and Business in Asia

100277 - Politics of Australia and Asia Relations

63111 - Special Topics in Asian and International Studies

101972 - The History of Modern Indonesia

100892 - The Westminster System: England's Constitutional Culture

Level 3 Units

101295 - Aesthetics

100957 - Alternative Histories: The State and Civil Society in Australian History

100987 - Australian History since 1920

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 19

100991 - Citizenship Ancient and Modern

100992 - Communication: Power and Practice

101249 - Culture and Thought in Twentieth-Century China

100860 - Emotions, Culture and Community

100863 - Ethical Cultures

100864 - Europe in the Twentieth Century

101844 - Feminist Theories

101674 - Global Histories of Food

100963 - Interpreting Australia: Australian Historians and Historiography

101801 - Interpreting Fascism

101823 - Lay Participation in Justice Processes (replaced by 102006)

100275 - Philosophies of Love and Death

100879 - Philosophy Today

101665 - Politics and Religion (replaced by 101913)

100908 - Race Politics

100284 - Special Topics in Australian History

100887 - Sport and Australian History

101667 - The External Relations of the European Union

101405 - The Politics of Contemporary Indonesia

101831 - Transport and the Making of the Modern World

101375 - War and Peace

100971 - Which New World Order?

100894 - World War 1

Sub-major - International Relations and Asian Studies

SM1073.1

This sub-major has been designed to meet the needs of Australian government, business and society to engage the states and peoples of Asia at all levels in pursuit of national interests and as part of the globalisation process. It provides students with the opportunity to study contemporary Asia, as well as the rich and diverse histories, politics, cultures and languages of Asian countries and the international issues affecting Australia's interests and role in the region and in the world at large. The sub-major area also includes a range of units concerned with the United States and Europe as well as with Asia itself, and units in international relations covering other parts of the world. It seeks to produce graduates with a broad, liberal education with the skills to mediate between Australia and the world in general and Asia in particular through political, economic, commercial, cultural, diplomatic and strategic links. Employment opportunities may be found in the State and Commonwealth public service, overseas organisations, the media, business and industry, education and research.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

To complete a sub-major in International Relations and Asian Studies, students must complete 40 credit points from the units listed below.

Choose two of

101442.2	Asia in the World
101956.1	Introduction to International Relations
100277.4	Politics of Australia and Asia Relations
101957.2	The Asian Century

Additional units to complete the sub-major can be chosen from the above four units, or from the following pool units.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

101882.1	A History of Modern Global Buddhism
101968.1	Civil Society in Contemporary China
100861.3	Empire: European Colonial Rule and its Subjects, 1750-1920
101797.2	Political Terror
101871.2	War

Level 3 Unit Pool

100985.2	American Foreign Policy Since 1945
100903.2	Democracy in Asia
102188.1	Dictators, Democrats and Dreamers: Indonesia 1942 to now
101735.2	Global Politics
100507.4	History of Modern China to 1949
102189.1	International Organisations and Global Governance
102190.1	International Relations of Southeast Asia
101467.2	Islam in Southeast Asia
101733.2	Looking at Global Politics Through Film
100271.3	Modern Japanese History
100278.2	Politics of Post-War Japan
63178.2	Social and Political Developments in Contemporary China
102187.1	Sultans, Colonists and Nationalists: Indonesia C1200-1942
101782.2	The History and Politics of Contemporary Central Asia
101783.2	The International Relations of the Middle East Since 1945
102005.1	The Politics of Civilisation
101866.1	United States Government and Politics
102142.1	Warlords, Artists and Emperors: Power and Authority in Japanese History
101375.2	War and Peace
101830.2	WWII in Asia and the Pacific

Please note:

The Level 2 and level 3 units listed below count towards completion of the sub-major for students who passed any of these units in 2015 or earlier.

101737 - World Politics: An Introduction (Level 1)

Level 2

100872 - Asia and the West: the Imperial Encounter

100245 - Asian Cinema

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 20

100850 - Buddhism in the Contemporary World

100855 - Contemporary Japan: Culture and Society

101857 - Doing Business in China

100262 - India: History in the Making of a Nation

100847 - International Politics of North Asia

100904 - Politics and Business in Asia

63111 - Special Topics in Asian and International Studies

101972 - The History of Modern Indonesia

Level 3

400087 - Applied Critical Methods

101249 - Culture and Thought in Twentieth Century China

100962 - International Politics of the South East Asia Region

101667 - The External Relations of the European Union

101963 - Understanding Global Insecurity

100971 - Which New World Order?

Sub-major - Islamic Studies

SM1074.1

Students engage in interdisciplinary study essential to an understanding of Islam, past and present. The area of study balances historical and modern Islamic studies and research methods. One of the keys to Islamic Studies is 'relevance' to contemporary Australian society but relevance can only come from a sound comprehension of past traditions in Islamic scholarship and their socio-historical contexts. Preparation for graduate study is also a key objective of this program, with its focus on developing critical and interdisciplinary research skills through a combination of approaches.

Location

Campus	Mode
Bankstown Campus	Internal

Specialisation Structure

Students must complete 40 credit points from the following pools.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 1

102296.1	Hadith: The Prophetic Tradition
101462.2	Understanding Islam and Muslim Societies

Level 2 Unit Pool

102294.1	Islam in the Modern World
101911.2	The Qur'an: An Introduction
101879.2	Women with Muslim Identity

Level 3 Unit Pool

101466.2	Ethical Traditions in Islam
102184.1	History of Muslim Civilisations and Ideas

101822.3	Islam in the West
101467.2	Islam in Southeast Asia
101465.2	Islamic Law in a Changing World
101468.2	Islam, Media and Conflict
101465.2	Islamic Law in a Changing World
102297.1	Islamic Revivalism in the Globalised World
101359.5	Sociology of Religion
101783.2	The International Relations of the Middle East Since 1945

Please note:

The Level 2 and level 3 units listed below count towards completion of the sub-major for students who passed any of these units in 2015 or earlier.

Level 2

101464 - Great Texts of Islam: Quran and Hadith

100273 - New Ethnicities, Old Racisms

Level 3

101688 - Anthropology of Religion

400087 - Applied Critical Methods

100877 - Multicultural Studies

101792 - Texts in Contemporary Arab Society and Culture

101471 - Women in Arabic and Islamic Literature

Sub-major - Linguistics

SM1075.1

Language is fundamental to the human experience. Through study of how language works, students make contact with fundamental philosophical, socio-cultural, and psychological questions about what it means to be human. Linguistics prepares students with a foundation for many careers including primary and secondary teaching, policy analysis, communication, and social services in culturally diverse communities. Linguistics students also gain the analytical tools of empirical science including the ability to break complex problems into components with tractable solutions and to evaluate theories on the basis of empirical facts. These skills prepare students for success in post-graduate studies and careers in research, analytics, business and law.

Location

Campus	Mode
Bankstown Campus	Internal

Specialisation Structure

To complete a sub-major in Linguistics, students must complete 40 credit points from the units listed below.

Choose at least two units from the following core units

101449.2	Bilingualism and Biculturalism
101945.2	Introduction to Linguistics
101947.1	Pragmatics
101451.2	Second Language Acquisition
101948.2	Structure of Language
102042.1	The Sound of Language

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 21

The other two units may be selected from the above list or from the pool units below

Level 3 Unit Pool

101946.1	Discourse Analysis
102043.1	Historical Linguistics
101950.1	Intercultural Communication
100023.5	Psychology of Language
102044.1	Research Methods in Linguistics
101450.2	Sociolinguistics
100201.2	Special Study in Languages and Linguistics

Please note:

The level 2 and level 3 units listed below count towards completion of the sub-major for students who passed units in the list below in 2015 or earlier.

Level 2

100194 - Introduction to Interpreting - [level 1]

100195 - Introduction to Translation - [level 1]

Level 3

400087 - Applied Critical Methods

101441 - English Semantics and Pragmatics

101454 - Intercultural Pragmatics

101709 - Languages and Grammatical Concepts 3A: Arabic

101710 - Languages and Grammatical Concepts 3A: Chinese

101711 - Languages and Grammatical Concepts 3A: Italian

101712 - Languages and Grammatical Concepts 3A: Japanese

101713 - Languages and Grammatical Concepts 3A: Spanish

101721 - Second Language Learning and Teaching

101832 - Talking Normal: Sociolinguistics and Modern Literature

101453 - Text and Discourse in English

Sub-major - Philosophy

SM1076.1

Philosophy has always asked the "big questions" about our lives. These are questions, for example, about the limits of our knowledge, the best way that humans can live together, how we understand the world around us, and what is the good life. A philosophy major will enable students to develop particular skills and attributes - such as clear thinking, capacities to assess arguments and values, sound understanding of important philosophical views that have always been essential to university scholarship, and which continue to be valuable for graduates in both public and private life.

Location

Campus	Mode
Bankstown Campus	Internal

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure

To complete a sub-major in Philosophy, students must complete 40 credit points. At least two units must come from the following four foundation units

101918.1	Introduction to Philosophy
101915.1	Ethics and Philosophy
101914.1	Case Studies in Philosophy: Thinker
101916.1	Case Studies in Philosophy: Text

Additional units to complete the sub-major can be chosen from the above four units, or from the following pool units.

Note: Not all units will be offered each year. Units will be offered on a rotational basis.

Level 2 Unit Pool

100244.2	Ancient Western Culture: Periclean Athens
100852.2	Classics of Modern Philosophy
101881.2	Philosophy and the Good Life
101867.2	The Ethical Life
101989.1	Thinking Cinema
101983.1	Truth and Knowledge
101912.1	Western Political Philosophy

Level 3 Unit Pool

101295.2	Aesthetics
102007.1	Ethics in Historical Perspective
101844.2	Feminist Theories
100961.4	Humanities Internship
100875.4	Literature and Philosophy
102417.1	Philosophy and Environment
100275.4	Philosophies of Love and Death
101965.1	Philosophy of Religion
100969.2	Theories of Conflict and Violence
101913.1	Theories of Authority
101798.2	Understanding Freedom
101731.3	Understanding Power
101010.3	What is the Human?

Please note:

The Level 2 listed below count towards completion of the major for students who may have passed units in the list in 2015 or earlier.

Level 2

101843 - Philosophy and Environment

Sub-major - Arabic

SM1077.1

Language specialisations aim to enable students to develop an appropriate level of proficiency in a second language, which may be used for professional purposes such as teaching, interpreting and translation, business or international relations. Students undertaking a language specialisation will be able to use the language in question according to its grammatical and pragmatic principles,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 22

communicate with native speakers appropriately in the spoken as well as the written mode, and demonstrate an understanding of the cultures and societies associated with the language.

Location

Campus	Mode
Bankstown Campus	Internal

Specialisation Structure

There are three entry levels into language sub-majors. Beginner's level is for those with no previous study or minimal study of the language. Intermediate level is typically for students who: are non-native speakers with study of the language to HSC 2 Unit level or have a home background in the language but no comprehensive formal study, or who speak a non-standard variety (e.g. dialect). Post-Intermediate level is typically for students who are non-native speakers with substantial formal study and near-native competence; or are literate native speakers of a standard variety. Students should consult with the Languages staff regarding the progression sequence that best fits their level of skill. During the first two weeks of class, the lecturer will monitor the performance of students and advise students who need to transfer to a higher or lower class. Students may consult with the Languages Academic Course Advisor, if they are unsure of their entry level. Students should avoid enrolling in units at different levels at the one time (e.g. you should not enrol in Arabic 201 and 301 at the same time). Please check the current timetable as some units may not be offered every year. Advanced (Level 3) units may be offered on a rotational basis.

A sub-major in Arabic is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 units

100041.2	Arabic 101
100042.2	Arabic 102

Level 2 units

102019.1	Arabic 201
102020.1	Arabic 202
102021.1	Arabic 203
102022.1	Arabic 204

Level 3 units

101949.2	Arabic 301
100048.2	Arabic 302 - Arabic Advanced Language and Grammar
100049.2	Arabic 303: Advanced Writing Skills
100050.2	Arabic 304: Arabic Advanced Speaking
100052.2	Arabic 306: Arabic Novel and Short Story
100054.2	Arabic 308:Language Past and Present

101950.1	Intercultural Communication
100201.2	Special Study in Languages and Linguistics

Please note:

The level 3 units listed below count towards completion of the sub-major for students who may have passed units in the list below in 2015 or earlier.

100051 - Arabic 305: Araboc Contemporary Culture

101454 - International Pragmatics

101709 - Languages and Grammatical Concepts 3A: Arabic

101792 - Texts in Contemporary Arab Society and Culture

101668 - World Cinema

Sub-major - Chinese

SM1078.1

Language specialisations aim to enable students to develop an appropriate level of proficiency in a second language which may be used for professional purposes such as teaching, interpreting and translation, business or international relations. Students undertaking a language specialisation will be able to use the language in question according to its grammatical and pragmatic principles, communicate with native speakers appropriately in the spoken as well as the written mode, and demonstrate an understanding of the cultures and societies associated with the language.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Please note that there are Inherent Requirements for this sub-major. Please check the requirements online.

There are three entry levels into language sub-majors. Beginner's level is for those with no previous study or minimal study of the language. Intermediate level is typically for students who: are non-native speakers with study of the language to HSC 2 Unit level or have a home background in the language but no comprehensive formal study, or who speak a non-standard variety (eg dialect). Post-Intermediate level is typically for students who are non-native speakers with substantial formal study and near-native competence; or are literate native speakers of a standard variety. Students should consult with the Languages staff regarding the progression sequence that best fits their level of skill. During the first two weeks of class, the lecturer will monitor the performance of students and advise students who need to transfer to a higher or lower class. Students may consult with Languages Course Advisor, if they are unsure of their entry level. Students should avoid enrolling in units at different levels at the one time (eg: you should not enrol in Chinese 201 and 301 at the same time). Please check the current timetable as some units may not be offered every year. Advanced (Level 3) units may be offered on a rotational basis.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 23

A sub-major in Chinese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 units

100056.2	Chinese 101
100057.2	Chinese 102

Level 2 units

102024.1	Chinese 201
102025.1	Chinese 202
102026.1	Chinese 203
102027.1	Chinese 204

Level 3 units

101951.1	Chinese 301
100063.2	Chinese 302
100064.2	Chinese 303: Twentieth-Century Chinese Literature
100065.2	Chinese 304: Chinese Classical Literature
100066.2	Chinese 305: Chinese Cinema
100510.2	Chinese 306: Traditional Chinese Thought
100067.2	Chinese 307: The Cultural Context of China
101950.1	Intercultural Communication
100201.2	Special Study in Languages and Linguistics

Please note:

The level 3 units listed below count towards completion of the sub-major for students who may have passed units in the list below in 2015 or earlier.

101454 - International Pragmatics

101710 - Languages and Grammatical Concepts 3A: Chinese

101668 - World Cinema

Sub-major - Japanese

SM1080.1

Language specialisations aim to enable students to develop an appropriate level of proficiency in a second language which may be used for professional purposes such as teaching, interpreting and translation, business or international relations. Students undertaking a language specialisation will be able to use the language in question according to its grammatical and pragmatic principles, communicate with native speakers appropriately in the spoken as well as the written mode, and demonstrate an understanding of the cultures and societies associated with the language.

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Please note that there are Inherent Requirements for this sub-major. Please check the requirements online.

There are three entry levels into language sub-majors. Beginner's level is for those with no previous study or minimal study of the language. Intermediate level is typically for students who: are non-native speakers with study of the language to HSC 2 Unit level or have a home background in the language but no comprehensive formal study. Post-Intermediate level is typically for students who are non-native speakers with substantial formal study and near-native competence; or are literate native speakers of the language. Students should consult with the Languages staff regarding the progression sequence that best fits their level of skill. During the first two weeks of class, the lecturer will monitor the performance of students and advise students who need to transfer to a higher or lower class. Students may consult with the Languages Course Advisor, if they are unsure of their entry level. Students should avoid enrolling in units at different levels at the one time (e.g. you should not enrol in Arabic 201 and 301 at the same time). Please check the current timetable as some units may not be offered every year. Advanced (Level 3) units may be offered on a rotational basis.

A sub-major in Japanese is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or

- take a Level 2 unit after passing a Level 3 unit in the same language

Level 1 units

100085.2	Japanese 101
100086.2	Japanese 102

Level 2 units

102028.1	Japanese 201
102029.1	Japanese 202 Speaking and Listening
102030.1	Japanese 203
102031.1	Japanese 204

Level 3 units

101952.1	Japanese 301
100092.3	Japanese 302
100093.2	Japanese 303: Contemporary Culture and Society
101970.1	Japanese 304: Discourse in Japanese
101971.1	Japanese 305: Advanced Reading and Writing
102219.1	Japanese 306: Japanese Popular Culture
101950.1	Intercultural Communication
100201.2	Special Study in Languages and Linguistics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 24

Please note:

The level 3 units listed below count towards completion of the sub-major for students who may have passed units in the list below in 2015 or earlier.

101454.2	Intercultural Pragmatics
100096.2	Japanese 306: Japanese for Business
100098.1	Japanese 308: Japanese Textual Studies
101668.1	World Cinema
101669.3	World Literature in Translation

Sub-major - Indonesian

SM1112.1

Language specialisations aim to enable students to develop an appropriate level of proficiency in a second language, which may be used for professional purposes such as teaching, interpreting and translation, business or international relations. Students undertaking a language specialisation will be able to use the language in question according to its grammatical and pragmatic principles, communicate with native speakers appropriately in the spoken as well as the written mode, and demonstrate an understanding of the cultures and societies associated with the language.

Location

Campus	**Mode**
Bankstown Campus	Multi Modal

Specialisation Structure

There are three entry levels into language sub-majors. Beginners level is for those with no previous study or minimal study of the language. Intermediate level is typically for students who: are non-native speakers with study of the language to HSC 2 Unit level or have a home background in the language but no comprehensive formal study, or who speak a non-standard variety (e.g. dialect). Post-Intermediate level is typically for students who are non-native speakers with substantial formal study and near-native competence; or are literate native speakers of a standard variety. Students should consult with the Languages staff regarding the progression sequence that best fits their level of skill. During the first two weeks of class, the lecturer will monitor the performance of students and advise students who need to transfer to a higher or lower class. Students may consult with the Languages Academic Course Advisor, if they are unsure of their entry level. Students should avoid enrolling in units at different levels at the one time (e.g. you should not enrol in Indonesian 201 and 301 at the same time). Please check the current timetable as some units may not be offered every year. Advanced (Level 3) units may be offered on a rotational basis.

A sub-major in Indonesian is any sequence of 40 credit points with no more than 20 credit points at Level 1.

Students should take units that reflect their level of competence in the language and they should not backtrack, i.e. they must not:

- take a Level 1 unit after passing a Level 2 unit in the same language; or
- take a Level 2 unit after passing a Level 3 unit in the same language.

Level 1 units

102316.1	Indonesian 101
102326.1	Indonesian 102

Level 2 units

102319.1	Indonesian 201
102327.1	Indonesian 202

Level 3 units

102320.1	Indonesian 301: Indonesian for Academic Purposes
102328.1	Indonesian 302: Indonesian for Professional Purposes
102329.1	Indonesian 303: Indonesian for Business
102330.1	Indonesian 304: Contemporary Indonesia
102331.1	Indonesian 305: Past and Present of Indonesian
102332.1	Indonesian 306: Indonesian Literature
101950.1	Intercultural Communication
100201.2	Special Study in Languages and Linguistics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 25

SCHOOL OF NURSING AND MIDWIFERY

Bachelor of Nursing (Advanced)

4693.2

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2017 or later.

This course prepares graduates for eligibility to apply for registration throughout Australia as beginning professional generalist registered nurses. The focus of the course is on inquiry-based learning, critical thinking and reflective practice in relation to the theory and practice of nursing in health and health breakdown across the lifespan. Students study application of physical and behavioural sciences to nursing; inquiry and evidence-based practice principles and utilisation within nursing; nursing care of individuals, families and groups from diverse backgrounds across the lifespan. The acquisition of nursing knowledge and skills occurs initially in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings. Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a declaration requirement when applying for registration as a registered nurse. Students should also be aware that the regulatory authority (the Nursing and Midwifery Board of Australia) may have additional criteria that the student will need to meet prior to registration to practice being granted.

Students in the Bachelor of Nursing (Advanced) will follow a similar study program set out for the Bachelor of Nursing. However there will be several units of study that engage students in additional learning, assessment and professional practice activities and opportunities. Each student will be allocated an Academic Mentor at the beginning of the second year of the program. Students are encouraged to participate in scholarly activities that will further enhance their knowledge and skills.

To maintain their enrolment in the Bachelor of Nursing (Advanced) students must maintain a Grade Point Average (GPA) of 5.5 or above, otherwise they will be transferred to the standard 4691 – Bachelor of Nursing course. At enrolment students will be required to sign a declaration acknowledging the requirement to maintain a GPA greater than or equal to 5.5.

Study Mode

Three years full-time. (This program will only be offered in full-time mode and is not available for students wishing to undertake a reduced load).

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Advanced Standing

Advanced standing is granted on a case by case basis. Students in this program will only be able to attract advanced standing for the elective unit (10 credit points unspecified). Prospective students will need to provide formal evidence of qualifications and supporting documentation to enable assessment. Credit transfer will be granted to eligible students internally transferring from the Bachelor of Nursing to the Bachelor of Nursing (Advanced) for completed first year nursing units.

Accreditation

The Bachelor of Nursing (Advanced) has accreditation and approval from the Nurses and Midwives Board NSW. From 1 July 2010 the approval, recognition and accreditation of courses has been transferred to the Australian Nursing and Midwifery Council (ANMAC). Course accreditation can be checked on their website. Http://www.anmac.org.au/accreditation-services. Please note: from 1 July 2010 practitioners applying for registration as a nurse or midwife for the first time in Australia are required to demonstrate English language proficiency as specified by the Nursing and Midwifery Board of Australia (NMBA). These requirements include: a) the IELTS examination (academic module) with a minimum score of 7 in each of the four components (listening, reading, writing and speaking); or b) completion and an overall pass in the Occupational English Test (OET) with grades A or B only in each of the four components. For further details, refer to the NMBA website. Http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx

Inherent requirements

There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission

Students who are likely to attract a Western Sydney University ATAR of more than 90 may apply for admission via UAC or transfer as a post Year 1 Bachelor of Nursing student with a GPA of greater than 6.0.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 26

qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements

To be enrolled in Bachelor of Nursing (Advanced), students must comply with NSW Ministry of Health Special Requirements for clinical practicum. These include 1). National Police Check or a criminal record clearance card/letter; International students require a police check (with English translation) from their own country or any country they have lived in, as well as one from Australia; 2). Meet NSW Ministry of Health verification requirements with regard to immunisation (a completed vaccination card with serology results); 3). NSW Health Code of Conduct signed; 4). Student Undertaking Placement/Declaration signed; 5). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; and 6). A current approved firstaid certificate. All requirements must be completed before eligible for clinical placement.

Course Structure

Qualification for this award requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

401000.1	Professional Practice Experience 1
401001.1	Primary Health Care in Action
401002.1	Bioscience 1
401003.2	Professional Communication

Spring session

401004.1	Professional Practice Experience 2
401005.1	Human Relations and Life Transitions
401006.1	Bioscience 2
401007.1	Approaches to Professional Nursing Practice

Year 2

Autumn session

401008.1	Professional Practice Experience 3
401009.1	Health in a Culturally Diverse Community
401010.1	Health Variations 1
401023.1	Research Principles for Nursing (Advanced)

Spring session

401012.1	Professional Practice Experience 4
401013.1	Promoting Mental Health and Wellbeing 1
401024.1	Health Variations 2 (Advanced)

401015.1	Health Variations 3

Year 3

Autumn session

401016.1	Professional Practice Experience 5
401025.1	Promoting Mental Health and Wellbeing 2 (Advanced)
401026.1	Health Variations 4 (Advanced)
401019.1	Health Variations 5

Spring session

401020.1	Professional Practice Experience 6
401027.1	Being a Professional Nurse (Advanced)
401028.1	Leadership in Nursing (Advanced)

And one elective

Additional Core Unit for Students with an Exceptional Study Pattern

To ensure currency of skill base, it is an accreditation requirement that students satisfactorily complete a minimum four week clinical practicum in the final session of their pre-registration Nursing program. Students within the Bachelor of Nursing (Advanced) who vary their study sequence significantly from the normal progression may be required to study the additional unit listed and should discuss this with the Head of Program.

400768.4	Maintaining Clinical Currency

Elective Unit

The elective unit in the Bachelor of Nursing may be chosen from across The University, provided that unit pre-requisites are met, space is available and students are able to meet all scheduled activities without compromising any nursing unit requirements.

The following are elective units in the Nursing discipline area which are not listed elsewhere in the Handbook. Some of these units are open to students from across The University provided that prerequisites are met and space is available.

400621.2	Bugs and Drugs
400961.1	Drugs on Line
400958.1	A Field Study: Comparative Studies of Health Care Delivery
401196.1	Contemporary Issues in Child and Adolescent Health

Professional Practice Experience

The Professional Practice Experience is the foundation for student learning in the course. It consists of two major learning contexts for students: professional practice and simulation. Professional practice in the health care sector may take place in any level of the health service appropriate to the focus for the specific Professional Practice Experience unit, for example aged care facilities, hospitals, GP practices, community health teams. This environment is essential for providing students complexity of the nursing experience, the ability to apply learning in situations involving ill persons, and socialises students into the work domain.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 27

Simulation is a teaching and learning strategy where aspects of the professional practice environment, such as a hospital ward or patient, are artificially created on campus to enable students to learn in a safe, non-threatening environment. Clinical Practice Units, simulated professional practice environments, will be used to allow students to undertake learning activities related to all core nursing skills such as administering medications and monitoring a patient's condition. The School has a wide range of simulation equipment and dedicated high fidelity simulation rooms on each campus.

The percentage of time spent by students in each context will vary depending on the stage of the student in the course, the theoretical knowledge already acquired and the stage of competency development. For example at the beginning of the course more hours will be spent in the simulation context than in the health care sector. As the course progresses there is a scaling up of hours spent in the health care sector with fewer hours being spent in the simulation context. In the final session of third year a significant proportion of knowledge and skills consolidation will occur primarily in a clinical practice environment.

Bachelor of Midwifery

4684.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2016 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course prepares graduates for eligibility to apply for registration throughout Australia as a beginning professional registered midwife. This course will develop midwives for the future who can integrate local and international knowledge for the benefit of pregnant and birthing women in Greater Western Sydney, and beyond. Graduates will work in partnership with women (and their families) in order to provide effective 'woman centred' care. Graduates from Western Sydney University will practice according to the International Definition of the Midwife and the Australian Nursing and Midwifery Council National Competency Standards for the Midwife. Students will apply critical, reflective and intellectual skills to the provision of evidence based midwifery care. The acquisition of midwifery knowledge and skills occurs initially in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings. Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a declaration requirement when applying for registration as a registered midwife.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Midwifery has accreditation and approval from Australian Health Practitioner Regulation Agency via their partner board the Nurses and Midwifery Board of Australia (NMBA).

Inherent requirements
There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission
Potential applicants should apply through the Universities Admission Centre (UAC).

Selection is on the basis of:

Academic merit (ATAR or its equivalent), and

Performance at an interview, by invitation, with the School of Nursing and Midwifery.

No provision for direct entry with the exception of Western Sydney University alternative entry pathways for Aboriginal and Torres Strait Islanders.

This course in not available to International students.

IELTS score of 7 with no band or subtest less than 6.5.

Special Requirements
To be enrolled in Bachelor of Midwifery , students must comply with NSW Ministry of Health Special Requirements for clinical practicum. These include 1). National Police Check or a criminal record clearance card/letter; International students require a police check (with English translation) from their own country or any country they have lived in, as well as one from Australia; 2). Meet NSW Ministry of Health verification requirements with regard to immunisation (a completed vaccination card with serology results); 3). NSW Health Code of Conduct signed; 4). Student Undertaking Placement/Declaration signed; 5). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; and 6). A current approved first aid certificate. All requirements must be completed before eligible for clinical placement.

Course Structure
Qualification for this award requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 28

Full-time

Year 1

Autumn session

401001.1	Primary Health Care in Action
401002.1	Bioscience 1
401030.1	Midwifery Knowledge 1
401045.1	Introduction to Midwifery Practice Experience

2H session

401033.1	Midwifery Practice Experience 1

Spring session

401005.1	Human Relations and Life Transitions
401031.1	Bioscience for Midwifery
401032.1	Midwifery Knowledge 2

Year 2

1H session

401035.1	Midwifery Practice Experience 2

Autumn session

401009.1	Health in a Culturally Diverse Community
401011.1	Research Principles for Nursing and Midwifery
401034.1	Midwifery Knowledge 3

2H session

401038.1	Midwifery Practice Experience 3

Spring session

401013.1	Promoting Mental Health and Wellbeing 1
401036.1	Complex Care 1
401037.1	Legal and Ethical Issues in Midwifery

Year 3

1H session

401042.1	Midwifery Practice Experience 4

Autumn session

401039.1	Complex Care 2
401040.1	Collaborative Care
401041.1	Midwifery Practice - Teaching and Learning

2H session

401043.1	Midwifery Practice - Models of Care
401044.1	Midwifery Practice Experience 5

Spring session

401021.1	Being a Professional Nurse or Midwife
401022.1	Leadership in Nursing and Midwifery

Midwifery Practice Experience

To enable students to experience midwifery practice across the calendar year as required by ANMAC, all Midwifery Practice Experience units (MPE's) are offered as 'H' units. The major types of experiences are in blocks of learning and in a woman-centred continuity of care model. Practice experiences for the Bachelor of Midwifery are documented within the practice units.

Practice Block

A number of practice experiences, in a variety of practice placements, are scheduled throughout the three year course. There are fewer hours of clinical practice in first year (approximately 25%) compared to second year (50%), with the most clinical practice allocated to the third year (75%) to enable students to consolidate their practice in readiness to meet the ANMC Competencies for practice as a midwife.

This practice occurs in blocks of time (from one day a week to five days per week) and includes working in hospital areas such as antenatal clinics; antenatal wards; birthing units; postnatal wards; newborn nursery; postnatal home visiting; operating theatres for caesarean sections; ultrasound clinics; fetal and maternal assessment units and gynaecology wards. The practice also includes working in such areas as community centres with child and family nurses; midwives in group practice; rural hospitals; and ambulance services.

Continuity of Care

Continuity of care/carer enables women to develop a relationship with the same caregiver(s) throughout pregnancy, birth and the postnatal period. Continuity of care/carer facilitates relationships and consistent information, which is essential to the provision of care that is safe, sensitive and appropriate. Students undertaking this course will be introduced to the theoretical concepts and evidence base for continuity of care/carer model within the Midwifery Knowledge units. Continuity of care/carer experience will be gained within the Midwifery Practice Experience units. Throughout the course, students will refine and develop their understanding of continuity of care/carer, underpinned by a woman-centred care philosophy, where women are involved in their own care, making informed choices and having control over both their care and their relationships with their caregivers. In this relationship-based care model, women generally feel that their choices are respected and supported (Johnson & Stewart, 2003). Students will follow 10 women over the course of the Bmid within this model of care; two women in the first year, three in the second year and five in the third year.

Students will begin their first midwifery practice placement within eight weeks of commencing the course in the Autumn semester or as soon as they have met all the pre-requisites. Students will attend well women's antenatal clinics on a weekly basis and begin by observing the practice of midwifery care. They will practice their midwifery skills on campus and as they gain confidence they will begin to have a more 'hands on' approach under the supervision of a midwife. During the antenatal clinic placements it is expected that students will meet and work in partnership with women in the continuity of care model. Students will follow the women throughout their pregnancy,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 29

labour and birth and during the postnatal period for up six weeks as determined by the woman, and the supervising midwife. This may include visits to the woman's home.

The practice blocks, together with the 10 continuity of care experiences across the calendar year, provide the BMid curriculum with approximately fifty percent clinical practice and fifty percent theory, which is a requirement of ANMC.

Bachelor of Nursing

4691.1

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2013 or later.

This course prepares graduates for eligibility to apply for registration throughout Australia as beginning professional generalist registered nurses. The focus of the course is on inquiry-based learning, critical thinking and reflective practice in relation to the theory and practice of nursing in health and health breakdown across the lifespan. Using a primary health care framework students study application of physical and behavioural sciences to nursing; inquiry and evidence-based practice principles and utilisation within nursing; nursing care of individuals, families and groups from diverse backgrounds across the lifespan. The acquisition of nursing knowledge and skills occurs initially in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings. Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a declaration requirement when applying for registration as a registered nurse. An English language skills registration standard is also applicable to all students applying for registration: (http://www.nursingmidwiferyboard.gov.au)

Study Mode
Three years full-time. A reduced load may be possible in consultation with Academic Course Advisor. Details of units that could comprise a reduced study load can be located on the School of Nursing and Midwifery Homepage - http://www.westernsydney.edu.au/nursingandmidwifery

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Advanced Standing
Advanced standing is granted on a case by case basis. Prospective students will need to provide formal evidence of qualifications and supporting documentation to enable assessment. Decisions will be based on evidence of currency of the qualification and also evidence of equivalence in learning outcomes/ major content having been satisfactorily completed. Advanced standing for professional practice experience units may require the

satisfactory completion of a skill challenge workshop prior to commencement of studies.
http://www.westernsydney.edu.au/nursingandmidwifery

- Certificate IV Health Related Qualifications: 10 cps unspecified (elective)
- Enrolled Nurse/Division 2 Nurse – Certificate IV or Advanced Certificate
- Enrolled Nurse/Division 2 Nurse – Diploma
- Overseas Registered Nurse – Certificate
- Overseas Registered Nurse – Diploma (not post secondary school)
- Overseas Registered Nurse – Diploma (3years post secondary school)
- Overseas Registered Nurse – Degree

Accreditation
The Bachelor of Nursing has accreditation and approval from the Nurses and Midwives Board NSW. From 1 July 2010 the approval, recognition and accreditation of courses has been transferred to the Australian Nursing and Midwifery Council (ANMAC). Course accreditation can be checked on their website. Http://www.anmac.org.au/accreditation-services. Please note: from 1 July 2010 practitioners applying for registration as a nurse or midwife for the first time in Australia are required to demonstrate English language proficiency as specified by the Nursing and Midwifery Board of Australia (NMBA). These requirements include: a) the IELTS examination (academic module) with a minimum score of 7 in each of the four components (listening, reading, writing and speaking); or b) completion and an overall pass in the Occupational English Test (OET) with grades A or B only in each of the four components. For further details, refer to the NMBA website. Http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx

Inherent requirements
There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission
Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 30

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements

To be enrolled in Bachelor of Nursing, students must comply with NSW Ministry of Health Special Requirements for clinical practicum. These include 1). National Police Check or a criminal record clearance card/letter; International students require a police check (with English translation) from their own country or any country they have lived in, as well as one from Australia; 2). Meet NSW Ministry of Health verification requirements with regard to immunisation (a completed vaccination card with serology results); 3). NSW Health Code of Conduct signed; 4). Student Undertaking Placement/Declaration signed; 5). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; and 6). A current approved firstaid certificate. All requirements must be completed before eligible for clinical placement.

Course Structure

Qualification for this award requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

401000.1	Professional Practice Experience 1
401001.1	Primary Health Care in Action
401002.1	Bioscience 1
401003.2	Professional Communication

Spring session

401004.1	Professional Practice Experience 2
401005.1	Human Relations and Life Transitions
401006.1	Bioscience 2
401007.1	Approaches to Professional Nursing Practice

Year 2

Autumn session

401008.1	Professional Practice Experience 3
401009.1	Health in a Culturally Diverse Community
401010.1	Health Variations 1
401011.1	Research Principles for Nursing and Midwifery

Spring session

401012.1	Professional Practice Experience 4
401013.1	Promoting Mental Health and Wellbeing 1
401014.1	Health Variations 2
401015.1	Health Variations 3

Year 3

Autumn session

401016.1	Professional Practice Experience 5
401017.1	Promoting Mental Health and Wellbeing 2
401018.1	Health Variations 4
401019.1	Health Variations 5

Spring session

401020.1	Professional Practice Experience 6
401021.1	Being a Professional Nurse or Midwife
401022.1	Leadership in Nursing and Midwifery

And one elective

Additional Core Unit for Students with an Exceptional Study Pattern

To ensure currency of skill base, it is an accreditation requirement that students satisfactorily complete a minimum four week clinical practicum in the final session of their pre-registration Nursing program. Students within the Bachelor of Nursing who vary their study sequence significantly from the normal progression may be required to study the additional unit listed and should discuss this with the Academic Course Advisor.

400768.4	Maintaining Clinical Currency

Elective Unit

The elective unit in the Bachelor of Nursing may be chosen from across The University, provided that unit pre-requisites are met, space is available and students are able to meet all scheduled activities without compromising any nursing unit requirements.

The following are elective units in the Nursing discipline area which are not listed elsewhere in the Handbook.

400621.2	Bugs and Drugs
400961.1	Drugs on Line
400958.1	A Field Study: Comparative Studies of Health Care Delivery
401196.1	Contemporary Issues in Child and Adolescent Health

Professional Practice Experience

The Professional Practice Experience is the foundation for student learning in the course. It consists of two major learning contexts for students: professional practice and simulation. Professional practice in the health care sector may take place in any level of the health service appropriate to the focus for the specific Professional Practice Experience unit, for example aged care facilities, hospitals, GP practices, community health teams. This environment is essential for providing students complexity of the nursing experience, the ability to apply learning in

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 31

situations involving ill persons, and socialises students into the work domain.

Simulation is a teaching and learning strategy where aspects of the professional practice environment, such as a hospital ward or patient, are artificially created to enable students to learn in a safe, non-threatening environment. Clinical practice units, simulated professional practice environments, will be used that allow students to undertake learning activities, such as administering medications and oxygen therapy. The School has a wide range of simulation equipment and dedicated high fidelity simulation rooms on each campus.

The percentage of time spent by students in each context will vary, depending on the stage of the student in the course, the theoretical knowledge acquisition, and ANMC competency development. For example at the beginning of the course more hours will be spent in the simulation context than in the health care sector. As the course progresses there is a scaling up of hours spent in the health care sector with fewer hours being spent in the simulation context. In the final session of third year a significant proportion of knowledge and skills consolidation will occur primarily in a clinical practice environment.

Bachelor of Nursing (Advanced)

4693.1

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2013 or later.

This course prepares graduates for eligibility to apply for registration throughout Australia as beginning professional generalist registered nurses. The focus of the course is on inquiry-based learning, critical thinking and reflective practice in relation to the theory and practice of nursing in health and health breakdown across the lifespan. Students study application of physical and behavioural sciences to nursing; inquiry and evidence-based practice principles and utilisation within nursing; nursing care of individuals, families and groups from diverse backgrounds across the lifespan. The acquisition of nursing knowledge and skills occurs initially in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings. Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a declaration requirement when applying for registration as a registered nurse. Students should also be aware that the regulatory authority (the Nursing and Midwifery Board of Australia) may have additional criteria that the student will need to meet prior to registration to practice being granted.

Students in the Bachelor of Nursing (Advanced) will follow a similar study program set out for the Bachelor of Nursing. However there will be several units of study that engage students in additional learning, assessment and professional practice activities and opportunities. Each student will be allocated an Academic Mentor and are encouraged to participate in scholarly activities that will further enhance their knowledge and skills.

To maintain their enrolment in the Bachelor of Nursing (Advanced) students must maintain a Grade Point Average (GPA) of 5.5 or above, otherwise they will be transferred to the standard 4691 – Bachelor of Nursing course. At enrolment students will be required to sign a declaration acknowledging the requirement to maintain a GPA greater than or equal to 5.5.

Study Mode

Three years full-time. (This program will only be offered in full-time mode and is not available for students wishing to undertake a reduced load).

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Advanced Standing

Advanced standing is granted on a case by case basis. Students in this program will only be able to attract advanced standing for the elective unit (10 credit points unspecified). Prospective students will need to provide formal evidence of qualifications and supporting documentation to enable assessment. Credit transfer will be granted to eligible students internally transferring from the Bachelor of Nursing to the Bachelor of Nursing (Advanced) for completed first year nursing units.

Accreditation

The Bachelor of Nursing (Advanced) has accreditation and approval from the Nurses and Midwives Board NSW. From 1 July 2010 the approval, recognition and accreditation of courses has been transferred to the Australian Nursing and Midwifery Council (ANMAC). Course accreditation can be checked on their website. Http://www.anmac.org.au/accreditation-services. Please note: from 1 July 2010 practitioners applying for registration as a nurse or midwife for the first time in Australia are required to demonstrate English language proficiency as specified by the Nursing and Midwifery Board of Australia (NMBA). These requirements include: a) the IELTS examination (academic module) with a minimum score of 7 in each of the four components (listening, reading, writing and speaking); or b) completion and an overall pass in the Occupational English Test (OET) with grades A or B only in each of the four components. For further details, refer to the NMBA website. Http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx

Inherent requirements

There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission

Students who are likely to attract an ATAR of more than 90 may apply for admission via UAC or transfer as a post UWS Year 1 Bachelor of Nursing student with a GPA of greater than 5.5.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 32

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements

To be enrolled in Bachelor of Nursing (Advanced), students must comply with NSW Ministry of Health Special Requirements for clinical practicum. These include 1). National Police Check or a criminal record clearance card/ letter; International students require a police check (with English translation) from their own country or any country they have lived in, as well as one from Australia; 2). Meet NSW Ministry of Health verification requirements with regard to immunisation (a completed vaccination card with serology results); 3). NSW Health Code of Conduct signed; 4). Student Undertaking Placement/Declaration signed; 5). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; and 6). A current approved firstaid certificate. All requirements must be completed before eligible for clinical placement.

Course Structure

Qualification for this award requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

401000.1	Professional Practice Experience 1
401001.1	Primary Health Care in Action
401002.1	Bioscience 1
401003.2	Professional Communication

Spring session

401004.1	Professional Practice Experience 2

401005.1	Human Relations and Life Transitions
401006.1	Bioscience 2
401007.1	Approaches to Professional Nursing Practice

Year 2

Autumn session

401008.1	Professional Practice Experience 3
401009.1	Health in a Culturally Diverse Community
401010.1	Health Variations 1
401023.1	Research Principles for Nursing (Advanced)

Spring session

401012.1	Professional Practice Experience 4
401013.1	Promoting Mental Health and Wellbeing 1
401024.1	Health Variations 2 (Advanced)
401015.1	Health Variations 3

Year 3

Autumn session

401016.1	Professional Practice Experience 5
401025.1	Promoting Mental Health and Wellbeing 2 (Advanced)
401026.1	Health Variations 4 (Advanced)
401019.1	Health Variations 5

Spring session

401020.1	Professional Practice Experience 6
401027.1	Being a Professional Nurse (Advanced)
401028.1	Leadership in Nursing (Advanced)

And one elective

Additional Core Unit for Students with an Exceptional Study Pattern

To ensure currency of skill base, it is an accreditation requirement that students satisfactorily complete a minimum four week clinical practicum in the final session of their pre-registration Nursing program. Students within the Bachelor of Nursing (Advanced) who vary their study sequence significantly from the normal progression may be required to study the additional unit listed and should discuss this with the Head of Program.

400768.4	Maintaining Clinical Currency

Elective Unit

The elective unit in the Bachelor of Nursing may be chosen from across The University, provided that unit pre-requisites are met, space is available and students are able to meet all scheduled activities without compromising any nursing unit requirements.

The following are elective units in the Nursing discipline area which are not listed elsewhere in the Handbook. Some of these units are open to students from across The University provided that prerequisites are met and space is available.

400621.2	Bugs and Drugs
400961.1	Drugs on Line
400958.1	A Field Study: Comparative Studies of Health Care Delivery

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 33

401196.1   Contemporary Issues in Child and Adolescent Health

Professional Practice Experience

The Professional Practice Experience is the foundation for student learning in the course. It consists of two major learning contexts for students: professional practice and simulation. Professional practice in the health care sector may take place in any level of the health service appropriate to the focus for the specific Professional Practice Experience unit, for example aged care facilities, hospitals, GP practices, community health teams. This environment is essential for providing students complexity of the nursing experience, the ability to apply learning in situations involving ill persons, and socialises students into the work domain.

Simulation is a teaching and learning strategy where aspects of the professional practice environment, such as a hospital ward or patient, are artificially created on campus to enable students to learn in a safe, non-threatening environment. Clinical Practice Units, simulated professional practice environments, will be used to allow students to undertake learning activities related to all core nursing skills such as administering medications and monitoring a patient's condition. The School has a wide range of simulation equipment and dedicated high fidelity simulation rooms on each campus.

The percentage of time spent by students in each context will vary depending on the stage of the student in the course, the theoretical knowledge already acquired and the stage of competency development. For example at the beginning of the course more hours will be spent in the simulation context than in the health care sector. As the course progresses there is a scaling up of hours spent in the health care sector with fewer hours being spent in the simulation context. In the final session of third year a significant proportion of knowledge and skills consolidation will occur primarily in a clinical practice environment.

Bachelor of Nursing (Graduate Entry)

4692.1

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2014 or later.

This course prepares graduates for eligibility to apply for registration throughout Australia as beginning professional generalist registered nurses. The focus of the course is on inquiry-based learning, critical thinking and reflective practice in relation to the theory and practice of nursing in health and health breakdown across the lifespan. Using a primary health care framework students study application of physical and behavioural sciences to nursing; inquiry and evidence-based practice principles and utilisation within nursing; nursing care of individuals, families and groups from diverse backgrounds across the lifespan. The acquisition of nursing knowledge and skills occurs initially in campus-based simulated clinical practice settings and consolidation occurs as students undertake clinical placements in a variety of health care settings.

The Bachelor of Nursing (Graduate Entry) is offered as a two year course beginning with an intensive, full-time unit of study that supports student transition into second year of the 4691 Bachelor Nursing program.

Prospective students should be aware that full disclosure of any issues of impairment or misconduct is a declaration requirement when applying for registration as a registered nurse. An English language skills registration standard is also applicable to all students applying for registration:

Study Mode
Two years full time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Advanced Standing

Additional advanced standing is not granted.

Accreditation

The Bachelor of Nursing (Graduate Entry) has accreditation and approval from the Nursing and Midwifery Board of Australia (NMBA) which is a partner board of the Australian Health Practitioners Registration Authority (AHPRA). Course accreditation can be checked on their website. http://www.nursingmidwiferyboard.gov.au/Accreditation.aspx. Please note: as from 1 July 2010 practitioners applying for registration as a nurse for the first time in Australia are required to demonstrate English language proficiency as specified by the Nursing and Midwifery Board of Australia (NMBA). These requirements include: a) the IELTS examination (academic module) with a minimum score of 7 in each of the four components (listening, reading, writing and speaking); or b) completion and an overall pass in the Occupational English Test (OET) with grades A or B only in each of the four components. For further details, refer to the website. Http://www.nursingmidwiferyboard.gov.au/Registration-Standards.aspx

Inherent requirements

There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission

Applicants must have successfully completed an (AEI-NOOSR equivalent) undergraduate degree, Graduate Diploma, Master's degree, or higher, in biological sciences, health or behavioural science (completed within the last 10 years),
OR
Completed a three year post-secondary qualification as a registered nurse (completed within the last 10 years).

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 34

International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements

To be enrolled in Bachelor of Nursing (Graduate Entry), students must comply with NSW Ministry of Health Special Requirements for clinical practicum. These include 1). National Police Check or a criminal record clearance card/letter; International students require a police check (with English translation) from their own country or any country they have lived in, as well as one from Australia; 2). Meet NSW Ministry of Health verification requirements with regard to immunisation (a completed vaccination card with serology results); 3). NSW Health Code of Conduct signed; 4). Student Undertaking Placement/Declaration signed; 5). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; and 6). A current approved firstaid certificate. All requirements must be completed before eligible for clinical placement.

Course Structure

Qualification for this award requires the successful completion of 170 credit points including the units listed in the recommended sequence below.

Full-time

Year 1

Summer B

| 401029.1 | Foundations for Nursing Practice |

Autumn session

401008.1	Professional Practice Experience 3
401009.1	Health in a Culturally Diverse Community
401010.1	Health Variations 1
401011.1	Research Principles for Nursing and Midwifery

Quarter 2

| 401065.1 | Professional Practice Experience A |

Spring session

401012.1	Professional Practice Experience 4
401013.1	Promoting Mental Health and Wellbeing 1
401014.1	Health Variations 2
401015.1	Health Variations 3

Year 2

Autumn session

401016.1	Professional Practice Experience 5
401017.1	Promoting Mental Health and Wellbeing 2
401018.1	Health Variations 4
401019.1	Health Variations 5

Spring session

401020.1	Professional Practice Experience 6
401021.1	Being a Professional Nurse or Midwife
401022.1	Leadership in Nursing and Midwifery

Additional Core Unit for Students with an Exceptional Study Pattern:

To ensure currency of skill base, it is an accreditation requirement that students satisfactorily complete a minimum four week clinical practicum in the final session of their pre-registration Nursing program. Students within the Bachelor of Nursing Graduate Entry (BNGE) who vary their study sequence significantly from the normal progression may be required to study the additional unit listed below and should discuss this with the BNGE Academic Course Advisor (ACA).

| 400768.4 | Maintaining Clinical Currency |

Professional Practice Experience

The Professional Practice Experience is the foundation for student learning in the course. It consists of two major learning contexts for students: professional practice and simulation. Professional practice in the health care sector may take place in any level of the health service appropriate to the focus for the specific Professional Practice Experience unit, for example aged care facilities, hospitals, GP practices, community health teams. This environment is essential to provide students with the complexity of the nursing experience, the ability to apply learning in situations involving ill persons, and socialises students into the work domain.

Simulation is where aspects of the professional practice environment, such as a hospital ward or patient, are artificially created to enable students to learn in a safe, non-threatening environment. Clinical practice units, simulated professional practice environments, will be used that allow students to undertake learning activities, such as administering medications and oxygen therapy. The School has a wide range of simulation equipment and dedicated high fidelity simulation rooms on each campus.

The percentage of time spent by students in each context will vary, depending on the stage of the student in the course, the theoretical knowledge acquisition, and ANMC

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 35

competency development. For example at the beginning of the course more hours will be spent in the simulation context than in the health care sector. As the course progresses there is a scaling up of hours spent in the health care sector with fewer hours being spent in the simulation context. In the final session of third year a significant proportion of knowledge and skills consolidation will occur primarily in a clinical practice environment.

Bachelor of Nursing (Honours)

4529.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2008 or later.

This program is designed for graduates of the Bachelor of Nursing degree and other similar degrees. Successful completion of the program will provide students with a sound basis for subsequent research within their own work environments as well as enabling them to progress to higher researcher-related programs.

This program provides an opportunity for students, under guidance, to plan and implement a research project in the area of nursing practice. Knowledge and experience gained by students through completing this program will contribute to the knowledge base for nursing practice.

The program of study combines a research project with course work. The course work, undertaken during the first semester of enrolment, comprises two units of study. The remainder of the program is devoted to completion of a research project and the preparation of a thesis.

This program can be undertaken concurrently with any new graduate transitional program offered by various hospitals.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Multi Modal
Parramatta Campus	Part Time	Multi Modal

Advanced Standing
Advanced Standing will be assessed in accordance with University policy.

Admission
The Bachelor of Nursing (Honours) degree is a second award as nursing students must satisfy the requirements for State registration as a Registered Nurse with a Bachelor's pass before proceeding into an Honours program.

Applicants must have obtained a Grade Point Average (GPA) of 5 (Credit level) or better throughout their Bachelor of Nursing course or a GPA of 5.75 or better in the final year of their Bachelor of Nursing (pass) degree. This criterion ensures that candidates are capable of achieving the high standards required for Bachelor of Nursing (Honours) studies. In addition, applicants must have completed at least 20 credit points of research or equivalent at an undergraduate level.

International applicants should contact International Office for details on admission. Contact information for the International Office is available via the Western Sydney University website.

Special Requirements
To be enrolled in this course students must comply with the Occupational Screening and Vaccination Policy of NSW Health at course commencement.

Course Structure
Qualification for this award requires the successful completion of 80 credit points including the units listed in the recommended sequence below.

Recommended Sequence

Full-time

Year 1

Autumn session

400803.2	Research in Nursing Practice
400202.2	Nursing Honours Thesis A (Full-time)
400201.3	Readings and Methodology

Spring session

400203.2	Nursing Honours Thesis B (Full-time)

Part-time

Year 1

Autumn session

400803.2	Research in Nursing Practice

Spring session

400201.3	Readings and Methodology

2H session

400204.2	Nursing Honours Thesis (Part-time)

Year 2

1H session

400204.2	Nursing Honours Thesis (Part-time)

2H session

400204.2	Nursing Honours Thesis (Part-time)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 36

SCHOOL OF COMPUTING, ENGINEERING AND MATHEMATICS

Bachelor of Applied Leadership and Critical Thinking

3725.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2015 or later.

The Bachelor of Applied Leadership and Critical Thinking (BALCT) is not a stand-alone degree, but is designed to be undertaken in combination with any Western Sydney bachelor degree. It focuses on ethical leadership, creativity, entrepreneurship and innovation, capacity to deal with complexities, relationship and critical thinking skills. The Academy's three pillars of academic rigour, professional and personal development and community engagement provide the perfect base upon which to offer this innovative degree. These characteristics and aptitudes are what the employer of tomorrow will be seeking in a graduate. Students enrolled in this degree will think from multiple perspectives, see and create opportunities, and bring creative, cooperative, empathetic and ethical leadership to his or her future role in the workplace – even if that role is, as yet, unimagined.

Study Mode

Four years or five years full-time depending on duration of undergraduate degree (see Pathways listed under Course Structure below) or the equivalent part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Multi Modal
Parramatta Campus	Part Time	Multi Modal

Advanced Standing

Advanced Standing will be granted for a maximum of 160 credit points. At least 80 credit points must be completed while enrolled in the Bachelor Applied Leadership and Critical Thinking.

Inherent requirements

There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission

Assumed knowledge: two units of HSC English.

This course is made available to high-achieving students only. To be eligible for admission to the BALCT, a student must attain a minimum ATAR of 80, or the minimum ATAR for their primary undergraduate degree, whichever is the higher.

Students must also maintain a grade point average of 5 or above throughout the duration of their study.

Current Western Sydney University students wishing to enrol must have a minimum GPA for 5 or above.

Non-school leavers must have completed an undergraduate degree with a minimum GPA of 5.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to The University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements

Students must have completed all requirements for another bachelor degree in order to graduate with the Bachelor of Applied Leadership and Critical Thinking.

Course Structure

The Bachelor of Applied Leadership and Critical Thinking (BALCT) is not a stand-alone degree, but is designed to be undertaken in combination with any Western Sydney bachelor degree.

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below and 160 credit points of Advanced Standing.

Recommended Sequence

Standard Pathway

Year 1

Autumn session

102211.1	Creativity, Innovation and Design Thinking
200855.1	Leadership in a Complex World
301071.1	Introduction to Critical Thinking
301069.1	Research Stories

2H Session

301072.1	Innovation Lab

Spring session

102250.1	Ethical Leadership
301070.1	Logic, Rhetoric and Argumentation

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 37

102212.1   Internship and Community Engagement

Four Year Accelerated Pathway

Year 1

Summer session

200855.1   Leadership in a Complex World

Year 2

Summer session

102211.1   Creativity, Innovation and Design Thinking
301071.1   Introduction to Critical Thinking

Year 3

Summer session

102250.1   Ethical Leadership
301069.1   Research Stories

Year 4

Summer session

301070.1   Logic, Rhetoric and Argumentation
102212.1   Internship and Community Engagement
301072.1   Innovation Lab

Five Year Accelerated Pathway

Year 1

Summer session

200855.1   Leadership in a Complex World

Year 2

Summer session

102211.1   Creativity, Innovation and Design Thinking
301071.1   Introduction to Critical Thinking

Year 3

Summer session

102250.1   Ethical Leadership
301069.1   Research Stories

Year 4

Summer session

301070.1   Logic, Rhetoric and Argumentation

Year 5

Summer session

102212.1   Internship and Community Engagement
301072.1   Innovation Lab

Bachelor of Building Design Management

3727.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2016 or later.

Over four years, this course develops the skills necessary for a role in the integrated design and delivery of building projects. Students develop skills in building design along with an understanding of 'buildability' issues, accurate cost forecasting, risk management and sustainable project delivery. The ability to work as a part of a multi-disciplinary project team and to negotiate favourable outcomes in complex project environments is fostered through simulations of real-life building projects. Students will acquire a comprehensive overview of construction project delivery. All aspects of building design are included: commencing with an initial design concept; extending to design brief formation; project documentation; quality control management during the building process; and finally leading to project handover. Students will be required to undertake approved practical experience during the course. This experience will support and complement their formal study.

Study Mode
Four years full-time or eight years part-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation
Accreditation for the Building Design Management Program will be sought from the Building Designers Association in 2016.

Admission

Assumed knowledge: HSC English and Mathematics/ Science.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website (UAC).

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 38

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

300706.2	Building 1
300729.2	Graphic Communication and Design
300975.1	Professional Competencies
301061.1	Construction Work Safety

Spring session

300707.2	Building 2
200909.1	Enterprise Law
200101.4	Accounting Information for Managers
301062.1	Environmental Building Design

Year 2

Autumn session

300720.2	Construction Technology 1 (Civil)
200486.3	Quantity Surveying 1
300723.2	Development Control

And one elective

Spring session

300721.4	Construction Technology 2 (Substructure)
200468.2	Estimating 1
301085.1	Built Heritage

And one elective

Year 3

Autumn session

200502.3	Construction Technology 3 (Concrete Construction)
300727.2	Project Management
301086.1	Design Brief Formulation

And one elective

Spring session

200470.4	Construction Technology 4 (Steel Construction)
300886.1	Construction in Practice 1
301087.1	Building Design Process

And one elective

Non-honours Stream

Year 4

Autumn session

200471.3	Construction Technology 5 (Envelope)
200504.2	Construction Economics
301099.1	Building Design Project 1

Spring session

300725.3	Construction Technology 6 (Services)
200484.5	Construction in Practice 3
301100.1	Building Design Project 2

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated Guidelines for the admission criteria.

Year 4 (Honours stream)

Autumn session

200471.3	Construction Technology 5 (Envelope)
200504.2	Construction Economics
301101.1	Building Design Project 1 (Honours)

Spring session

300725.3	Construction Technology 6 (Services)
200484.5	Construction in Practice 3
301102.1	Building Design Project 2 (Honours)

Industry Experience

All students enrolled in Bachelor of Building Design Management must obtain, through their own initiative, 1200 hours of industry related employment prior to graduation.

To facilitate the recording of such experience it will be necessary to enrol in 300724 Industry Based Learning and have an Industry Experience Diary signed off by the Academic Course Advisor.

| 300724.2 | Industry Based Learning |

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

| 301089.1 | Special Technical Project |

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 39

Bachelor of Computer Science

3506.7

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2014 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

The Bachelor of Computer Science course provides students with a thorough and in-depth technical understanding of modern networked computer systems. This understanding includes how these computer systems are put together, how they work and what are the principles that govern them. Based on this solid foundation students then have the opportunity to further learn the practical skills needed to design, develop and integrate the networked computer systems required by today's large organisations. This course is a three year course with three distinct majors which allow students to specialise in different applications of computer science and computer systems. The three majors are: systems security, networked systems and systems programming.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Accreditation
The Bachelor of Computer Science currently is accredited with the Australian Computer Society (ACS) at Professional Level.

Admission
Assumed Knowledge: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Full-time - Start Year Intake

Year 1

Autumn session

300700.5	Statistical Decision Making
300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
200025.2	Discrete Mathematics

Spring session

300096.5	Computer Organisation
300147.4	Object Oriented Programming
300104.4	Database Design and Development
300565.2	Computer Networking

Year 2

Autumn session

300952.1	Wireless and Mobile Networks
300103.3	Data Structures and Algorithms
300582.3	Technologies for Web Applications

And one elective

Spring session

300960.3	Mobile Applications Development
300128.4	Information Security
300115.3	Distributed Systems and Programming

And one elective

Year 3

Autumn session

300578.3	Professional Development
300167.3	Systems Programming 1

And two electives

Spring session

300579.5	Professional Experience
300404.2	Formal Software Engineering

And two electives

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 40

Full-time - Mid-Year Intake

Year 1

Spring session

300580.2	Programming Fundamentals
300104.4	Database Design and Development
300565.2	Computer Networking

And one elective

Autumn session

300700.5	Statistical Decision Making
100483.2	Principles of Professional Communication 1
200025.2	Discrete Mathematics
300582.3	Technologies for Web Applications

Year 2

Spring session

300096.5	Computer Organisation
300147.4	Object Oriented Programming
300960.3	Mobile Applications Development

And one elective

Autumn session

300952.1	Wireless and Mobile Networks
300103.3	Data Structures and Algorithms
300578.3	Professional Development

And one elective

Year 3

Spring session

300128.4	Information Security
300404.2	Formal Software Engineering
300115.3	Distributed Systems and Programming

And one elective

Autumn session

300579.5	Professional Experience
300167.3	Systems Programming 1

And two electives

Accelerated Pathway - Summer Sessions

Year 1

Autumn session

300700.5	Statistical Decision Making
300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
200025.2	Discrete Mathematics

Spring session

300096.5	Computer Organisation
300147.4	Object Oriented Programming
300104.4	Database Design and Development
300565.2	Computer Networking

Summer A session

300582.3	Technologies for Web Applications
300952.1	Wireless and Mobile Networks

Year 2

Autumn session

300103.3	Data Structures and Algorithms

And three electives

Spring session

300404.2	Formal Software Engineering
300128.4	Information Security
300115.3	Distributed Systems and Programming

And one elective

Summer A session

300578.3	Professional Development
300960.3	Mobile Applications Development

Year 3

Autumn session

300579.5	Professional Experience
300167.3	Systems Programming 1

And two electives

Recommended Elective Units

300093.4	Computer Graphics
300095.4	Computer Networks and Internets
300130.3	Internet Programming
300143.3	Network Security
300166.2	Systems and Network Management
300799.1	Advanced Theoretical Computer Science
300368.2	Intelligent Systems
300575.2	Networked Systems Design
300569.2	Computer Security
300583.2	Web Systems Development
300698.4	Operating Systems Programming
300958.2	Social Web Analytics
300165.3	Systems Administration Programming

Majors

The majors listed below were designed specifically for this course and are recommended for Bachelor of Computer Science students.

M3071.1	Systems Programming
M3072.1	Networked Systems
M3073.1	Systems Security

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 41

Students can apply for an elective major or sub-major via MySR.

Bachelor of Computer Science (Advanced)

3634.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2014 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is an advanced version of Bachelor of Computer Science. It provides students with a thorough and in-depth technical understanding of modern networked computer systems. This understanding includes how these computer systems are put together, how they work and what are the principles that govern them. Based on this solid foundation students then have the opportunity to further learn the practical skills needed to design, develop and integrate the networked computer systems required by today's large organisations. This course is a three year course with three distinct majors which allow students to specialise in different applications of computer science and computer systems. The three majors are: systems security, networked systems and systems programming.

Students in the Bachelor of Computer Science (Advanced) will follow the same study program that is set out for the Bachelor of Computer Science. However, each student in this course will have an academic mentor and the student will also participate in additional compulsory activities including research projects. To maintain their enrolment in the Bachelor of Computer Science (Advanced) students must maintain an overall above 5 Grade Point Average, otherwise they will be transferred to the standard 3506 – Bachelor of Computer Science course. At enrolment students will be required to sign a declaration acknowledging the need to maintain a grade-point average (GPA) of 5.0 or more.

For more information refer to the entry for 3506 Bachelor of Computer Science.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Accreditation
The Bachelor of Computer Science currently is accredited with the Australian Computer Society (ACS) at Professional Level.

Admission
Assumed Knowledge: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
In addition to the units outlined in the course structure for 3506 Bachelor of Computer Science, students in the advanced program must also complete the following three units.

Students must enrol in both 1H and 2H sessions.

Year 1

1H session

300586.2	Advanced Computer Science Activities 1

2H session

300586.2	Advanced Computer Science Activities 1

Year 2

1H session

300587.2	Advanced Computer Science Activities 2

2H session

300587.2	Advanced Computer Science Activities 2

Year 3

1H session

300588.2	Advanced Computer Science Activities 3

2H session

300588.2	Advanced Computer Science Activities 3

Sub-major elective spaces
Students in Advanced courses may use elective units toward obtaining an additional approved sub-major in Applied Leadership or Critical Thinking.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 42

Bachelor of Construction Management

2607.8

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is aimed at providing the skills and abilities necessary to perform competently at a professional level in the building industry, in one or more of the following roles: Construction Managers, Project Managers, Building Supervisors, Estimators, Quantity Surveyors and Building Researchers.

Students will develop specialised skills in construction management. The Construction Management program is widely recognised for delivering the full suite of theoretical, practical, and hands-on experience in the area of construction management. Students will study four concentrated areas related to the delivery of construction projects. These are construction technology; construction economics; construction law; and construction resource management. Additionally, students will be required to undertake a total of 1,200 hours approved practical experience during the course.

There are a number of opportunities during the course for obtaining a cadetship in the building industry in areas including building surveying, construction economics, and construction management.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Accreditation
The Bachelor of Construction Management is accredited with the Australian Institute of Building. Graduates are eligible for Probationer membership with advancement to Associate membership of the Australian Institute of Quantity Surveyors (AIQS) after Assessment of Professional Competence.

Admission
Assumed knowledge required: HSC Mathematics, Physics and English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

International applicants must apply directly to Western Sydney University via the International Office.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website (UAC).

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
Qualification for this award requires the successful completion of 320 credit points which include units in the recommended sequence below. Electives within the sequence may be used towards obtaining an approved submajor for this award.

Recommended Sequence

Full-time

Year 1

Autumn session

300706.2	Building 1
300729.2	Graphic Communication and Design
300975.1	Professional Competencies
300016.2	Design Science

Spring session

300707.2	Building 2
200909.1	Enterprise Law
200101.4	Accounting Information for Managers
200912.1	Enterprise Leadership

Year 2

Autumn session

300720.2	Construction Technology 1 (Civil)
200486.3	Quantity Surveying 1
200472.3	Material Science in Construction
300723.2	Development Control

Spring session

300721.4	Construction Technology 2 (Substructure)
200468.2	Estimating 1
300885.1	Building Regulations Studies

And one elective

Year 3

Autumn session

200502.3	Construction Technology 3 (Concrete Construction)
301105.1	Negotiation in the Built Environment
300727.2	Project Management
300728.2	Construction Planning

Spring session

200470.4	Construction Technology 4 (Steel Construction)
300886.1	Construction in Practice 1
300053.3	Professional Practice

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 43

200292.2   Building Law

Non-Honours Stream

Year 4

Autumn session

200471.3   Construction Technology 5 (Envelope)
200504.2   Construction Economics
300536.4   Major Project in Construction

And one elective

Spring session

300725.3   Construction Technology 6 (Services)
200484.5   Construction in Practice 3

And two electives

Honours Stream

An Honours stream is offered - see the Honours in Bachelors Awards Policy and associated College Guidelines for the admission criteria.

Year 4 (Honours stream - H3000)

Autumn session

200471.3   Construction Technology 5 (Envelope)
200504.2   Construction Economics
300675.3   Honours Thesis

Spring session

300725.3   Construction Technology 6 (Services)
200484.5   Construction in Practice 3
300675.3   Honours Thesis

Sub-major in Construction Economics

SM3029.1   Construction Economics

To graduate with a sub-major in Construction Economics students must successfully complete the following specialist units in place of elective units.

Specialist unit

200503.2   Construction Information Systems

Specialist unit

200487.3   Quantity Surveying 2

Specialist unit

300748.2   Quality and Value Management

Specialist unit

300726.2   Estimating 2

Industrial Experience

All students enrolled in Bachelor of Construction Management must obtain, through their own initiative, 1200 hours of construction management related employment before being eligible for graduation.

To facilitate the recording of such experience it will be necessary to enrol in 300724 Industry Based Learning and have an Industry Experience Diary signed off by the Course Coordinator.

300724.2   Industry Based Learning

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1   Special Technical Project

Sub-major elective spaces

Examples of sub majors that students could complete

SM2050.1   Property Investment
SM1093.1   Geography and Urban Studies

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Construction Management Studies (Exit only)

3697.1

This is an Exit course only. Applicants apply to 2769 Bachelor of Construction Management Studies/Bachelor of Laws and exit with the Bachelor of Construction Management Studies award.

Study Mode
Three years full-time or six years part-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Course Structure

Recommended Sequence

Full-time

Year 1

Autumn session

200006.2   Introduction to Law
200008.3   Torts Law
300706.2   Building 1
300729.2   Graphic Communication and Design

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 44

Spring session

200007.2	Law Foundation
200010.2	Criminal Law
300707.2	Building 2
200101.4	Accounting Information for Managers

Year 2

Autumn session

200011.2	Contracts
300720.2	Construction Technology 1 (Civil)
200486.3	Quantity Surveying 1
300723.2	Development Control

Spring session

200012.4	Property Law
300721.4	Construction Technology 2 (Substructure)
200468.2	Estimating 1
300885.1	Building Regulations Studies

Year 3

Autumn session

200020.5	Professional Responsibility and Legal Ethics
200502.3	Construction Technology 3 (Concrete Construction)
300727.2	Project Management
300728.2	Construction Planning

Spring session

200009.3	Constitutional Law
200470.4	Construction Technology 4 (Steel Construction)
300536.4	Major Project in Construction
200484.5	Construction in Practice 3
300724.2	Industry Based Learning

Bachelor of Construction Technology

3692.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course provides the skills and abilities necessary to perform competently at a professional level in the residential construction industry, in one or more of the following roles: Site Manager, Building Supervisor, Estimator and Building Surveyor. Students will develop specialised skills in construction management. The Construction Technology program is widely recognised for delivering the full suite of theoretical, practical, and hands-on experience in the area of residential construction.

Students will study four concentrated areas related to the delivery of residential construction projects. These are construction technology; construction economics; construction law; and construction resource management. There may be a number of opportunities during the course to obtain a cadetship in the building industry in areas including project home building, building surveying and residential development. The three year Bachelor of Construction Technology program may be used as a pathway to the four year Bachelor of Construction Management program which meets the Australian Institute of Building (AIB) professional accreditation requirements.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Admission

Assumed knowledge required: Normal Western Sydney University ATAR score with HSC 2 unit Mathematics, Physics and English for entry into first year.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website (UAC).

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below. Students should have no more than 100 credit points of Level 1 units and no fewer than 60 credit points of Level 3 Units.

In some instances due to resource and demand considerations, there may be a need to rearrange the pattern set down below.

Recommended Sequence

Full-time

Year 1

Autumn session

300706.2	Building 1
300729.2	Graphic Communication and Design

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 45

300975.1	Professional Competencies
300016.2	Design Science

Spring session

200909.1	Enterprise Law
200101.4	Accounting Information for Managers
300707.2	Building 2
200912.1	Enterprise Leadership

Year 2

Autumn session

300720.2	Construction Technology 1 (Civil)
200486.3	Quantity Surveying 1
200472.3	Material Science in Construction
300723.2	Development Control

Spring session

300721.4	Construction Technology 2 (Substructure)
200468.2	Estimating 1
300885.1	Building Regulations Studies

And Elective 1

Year 3

Autumn session

301105.1	Negotiation in the Built Environment
300727.2	Project Management
300728.2	Construction Planning

And Elective 2

Spring session

300886.1	Construction in Practice 1
300053.3	Professional Practice
200292.2	Building Law

And Elective 3

Please note

Students may choose electives from any of The University`s courses, including the following units

Elective 1 options

Choose one of

200503.2	Construction Information Systems
200502.3	Construction Technology 3 (Concrete Construction)

Elective 2 option

300748.2	Quality and Value Management

Elective 3 options

Choose one of

200487.3	Quantity Surveying 2
200470.4	Construction Technology 4 (Steel Construction)

Bachelor of Construction Technology students wishing to continue on to gain Bachelor of Construction Management are required to undertake the following electives

200502.3	Construction Technology 3 (Concrete Construction)
200470.4	Construction Technology 4 (Steel Construction)

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Bachelor of Data Science

3734.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2016 or later.

The Bachelor of Data Science is not a stand-alone degree, but is designed to be undertaken in combination with any bachelor degree. Students must have completed all requirements for another bachelors degree in order to graduate with the Bachelor of Data Science.

Digital data plays an increasingly important role in many areas of endeavour. Extracting information from data has become a science in itself – Data Science. Graduates from many disciplines, will benefit from skills in Data Science. This course teaches a blend of skills from mathematics, statistics and computing, Graduates will know how to embark on data driven investigations, and conduct visual and computational analytics for application in their own primary discipline.

Study Mode

Four years or five years full time depending on duration of undergraduate degree (see Pathways listed under Course Structure below) or the equivalent part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal

Admission

ATAR>75

Recommended studies: Mathematics, Computing/IT

Assumed knowledge required: Mathematics equivalent to 2 Unit HSC

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 46

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

The Bachelor of Data Science is not a stand-alone degree, but is designed to be undertaken in combination with any bachelor degree.

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below and 160 credit points of Advanced Standing. At least 80 credit points must be completed while enrolled in the Bachelor of Data Science.

Recommended Sequence

Year 1

Autumn session

301033.1	Introduction to Data Science
301108.1	Thinking About Data
301107.1	Analytics Programming
301034.1	Predictive Modelling

Spring Session

301109.1	Visual Analytics
301110.1	Applications of Big Data
300958.2	Social Web Analytics
301111.1	Discovery Project

Plus 160 credit points of advanced standing which must include a minimum of:

20 credit points at Level 3 units for a three year degree (240 credit points)

100 credit points at Level 3 or above for a four year degree (320 credit points)

Bachelor of Design and Technology

3729.1

This course replaces 3502 Bachelor of Design and Technology from 2016.

This course prepares students for a career in industrial design and/or industrial graphics. This is achieved by providing a sound knowledge of units in a broad range of design disciplines, including design methodology, design innovation, product design, ergonomics, manufacturing technology and design, management, 2D and 3D CAD. Students interested in a teaching career in Design and Technology may take the end-on Bachelor of Teaching degree or Graduate diploma in Education after completing their Design and Technology degree.

The program provides an array of three majors (Graphics and Visualisation, Design Management and Entrepreneurship, and Design-Led Innovation and Management) and five sub-majors (Visualisation, Human Interaction, Industrial Manufacturing, Design Management, Responsible Design and Sustainability). The course pathway is transformative by practice on progressive priorities of product, process, people and place. In first year, it introduces students to the basic skills of making products, design thinking and literacy, physical and digital methods, professional standards, and essential foundation knowledge of science and mathematics for industrial design. In second year, the program takes students deeper into the profession by working on design process through design management, visualisation, human-computer interaction and sustainable design. In third year, the program brings students to consolidate competencies and expertise by focusing on people, place and socio-cultural context as critical components of the design problem. Students are expected to complete an incremental process of industrial experience by this year. They are also required to undertake a sub-major from different streams within the program to complete the course.

Study Mode

Three years full time or six years part-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation

Graduates are eligible for membership of the Design Institute of Australia (DIA).

Admission

There are no specific subject prerequisites for entry into the course. Preferably, students should have successfully completed the HSC at the 2U level or better in English and at least two of the following units: Design & Technology, Arts, Physics, and Mathematics. Alternative entry: Certificate, Associate Diploma or Advanced Diploma from TAFE or another recognized teaching institution or equivalent in the discipline area. In some cases, professional experience will be counted towards alternative entry.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 47

directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

To be eligible to graduate from this course, students are required to complete a sub-major from the list below.

Year 1

Autumn session

301030.1	Introduction to Industrial Design Methods
300016.2	Design Science
301073.1	Design Studio 1: Patterns and Products
301074.1	Graphics 1: 2D and 3D Industrial Design Communication

Spring session

301075.1	Design Studio 2: Form and Production
301076.1	Graphics 2: Visual Simulation
301095.1	Sustainable Design 1: Materials and Technology
301077.1	Mathematics for Industrial Design

Year 2

Autumn session

301078.1	Design Studio 3: Design, Process and Function
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation
300570.3	Human-Computer Interaction

And one Major/Sub-major Alternate unit or elective

Spring session

301080.1	Design Studio 4: Innovation through Systems Thinking
301081.2	Sustainable Design 2: Product Service Systems
301082.1	Design Management 2: Operation and Supply Chain

And one Major/Sub-major Alternate unit or elective

Year 3

Autumn session

| 301083.1 | Design Studio 5: Symbol and Meaning Making |

| 300014.3 | Design Management 3: Organisational Skills for Designers |

And two Major/Sub-major Alternate units or electives

Spring session

| 301084.1 | Design Studio 6: Ambience, Place and Behaviour |
| 301090.1 | Contextual Inquiry |

And two Major/Sub-major Alternate units or electives

Industrial Experience

| 300775.2 | Industrial Experience |

Majors and Sub-majors

The Bachelor of Design and Technology is offered on Penrith (Kingswood) Campus only. Students may be required to travel between campuses in order to complete some units within specific majors and sub-majors.

Majors

M3091.1	Visualisation and Graphics
M3092.1	Design Management and Entrepreneurship
M3093.1	Design-led Innovation and Management

Sub-majors

SM3084.1	Visualisation
SM3085.1	Human-Computer Interaction
SM3086.1	Industrial Manufacturing
SM3087.1	Design Management
SM3088.1	Responsible Design and Sustainability

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

| 301089.1 | Special Technical Project |

Bachelor of Engineering (Honours)

3740.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

The Bachelor of Engineering (Honours) is a four year degree program with common first year structure. The program has been designed to meet Engineers Australia professional accreditation requirements – Competency Stage 1 Professional Engineers and Australian Quality Frameworks (AQF) Level 8. It allows students the opportunity to choose a discipline area by selecting a key program in Civil, Construction, Electrical, Mechanical, and Robotic & Mechatronic engineering. In addition, students can specialise by selecting a sub-major from a wide range

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 48

of recommended alternate unit sets that will complement their chosen discipline.

Study Mode
Four years full-time or eight years part-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation
Graduates of this program are eligible to apply for full membership of Engineers Australia. They are eligible to apply for Chartered Professional Engineering registration upon successful completion of required engineering practice period specified by Engineers Australia.

Admission
Recommended studies: Physics and HSC Mathematics Extension 1 or HSC Mathematics Extension 2.

Assumed knowledge required: Two units of Science, two units of English and Mathematics (not General Mathematics) at Band 5 or higher.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office. International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Academic Course Advisor
Dr Xinqun Zhu is the Academic Course Advisor for Key Programs in Civil and Construction.

Dr Jamal Rizk is the Academic Course Advisor for Key Program in Electrical.

Dr Jonathan Vincent is the Academic Course Advisor for Key Programs in Mechanical and Robotics & Mechatronics.

Recommended Sequence
Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequences below.

Full-time Autumn intake

Year 1

Autumn session

All students undertaking the Bachelor of Engineering (Honours) are required to enrol in 300743 Mathematics for Engineers Preliminary and undertake a readiness test at the beginning of their study. The readiness test will be conducted at the beginning of the first semester of enrolment and the result will be used to determine whether a student will remain in 300743 Mathematics for Engineers Preliminary or be transferred by the School to 200237 Mathematics for Engineers 1. Students remaining in 300743 Mathematics for Engineers Preliminary will be required to complete 200237 Mathematics for Engineers 1 during second semester and will be encouraged to complete 200238 Mathematics for Engineers 2 during the Summer session.

300743.2	Mathematics for Engineers Preliminary

or

200237.4	Mathematics for Engineers 1
300027.2	Engineering Computing
300963.1	Engineering Physics
300964.1	Introduction to Engineering Practice

Spring session

200238.2	Mathematics for Engineers 2
300021.2	Electrical Fundamentals
300463.2	Fundamentals of Mechanics
300965.1	Engineering Materials

Year 2 - Year 4

Students must then select one of the following key programs

KT3135.1	Civil
KT3136.1	Construction
KT3137.1	Electrical
KT3138.1	Mechanical
KT3139.1	Robotics and Mechatronics

Bachelor of Engineering (Honours)/ Bachelor of Business

3728.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

The Bachelor of Engineering (Honours)/Bachelor of Business double degree permits students to undertake multi-skilling and offers diverse career paths providing high marketability in multiple engineering and business areas. The Engineering degree provides students with professional skills in each of the five key areas students choose to study. The five engineering key programs are Civil, Construction, Electrical, Mechanical, and Robotics & Mechatronics. Depending on the Business Major selected,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 49

employment possibilities are available in conventional engineering industries and also in areas including Applied Finance, Economics, Management, or Marketing. Graduates will be equipped to work as engineers, with a good understanding of business principles and practices.

Study Mode

Five years full-time or 10 years part-time. The Bachelor of Engineering (Honours) is offered on Penrith Campus (Kingswood) only. The Bachelor of Business offers a number of its majors at Bankstown, Campbelltown and Parramatta campuses. Students may be required to travel between campuses in order to complete these B Business majors.

Location

Campus	Attendance	Mode
Bankstown Campus	Full Time	Internal
Bankstown Campus	Part Time	Internal
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation

Accreditation by Engineers Australia for the Bachelor of Engineering (Honours)/Bachelor of Business is currently being sought. Major MT2021 Applied Finance satisfies the educational requirements for membership of the Financial Services Institute of Australasia (Finsia). Major MT2024 Human Resource Management - the School of Business will seek to have the Bachelor of Business (Human Resource Management) accredited with the Australian Human Resources Institute (AHRI). Major MT2025 International Business satisfies the educational requirements for membership of the Australian Institute of Export. Major MT2027 Marketing satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute (AMI).

Admission

Eligibility for admission to the Bachelor of Engineering (Honours)/Bachelor of Business is based on the following requirements

The following sets of Assumed Knowledge and Recommended Studies apply.

Assumed Knowledge: HSC Mathematics (Band 5 or higher), any two units of science, any two units of English.

Recommended studies: Physics, HSC Mathematics Extension 1 or HSC Mathematics Extension 2.

Practical Experience: A session of industrial experience is required at the end of the third or fourth year.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 400 credit points which include the units in the recommended sequence below.

Students who complete this award will graduate with two testamurs

- Bachelor of Engineering (Honours), with the Bachelor of Engineering key program noted on the testamur, and
- Bachelor of Business, with the Bachelor of Business Major noted on the testamur.

Engineering Component

Students must study seven Engineering Foundation units followed by 15 Engineering Core units and two Engineering Thesis units in one of the following Bachelor of Engineering (Honours) programs.

KT3143.1	Civil
KT3144.1	Construction
KT3145.1	Electrical
KT3146.1	Mechanical
KT3147.1	Robotics and Mechatronics

Business Component

Core units (compulsory 40 credit points)

200909.1	Enterprise Law
200910.1	Financing Enterprises
200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership

Professional units (choose 40 credit points)

The professional units provide a focus on careers. Students are required to complete one unit from each of the four key focus areas: numeracy, career planning, innovation, and enterprise engagement, a total of 40 credit points. Students are advised to choose units that will support careers in one of three areas: Money (for majors in Applied Finance and Economics), Markets (for majors in Hospitality Management, International Business, Marketing and Sport Management), Management (for majors in Human Resource Management and Management). The professional units that are recommended for each of the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 50

Bachelor of Business testamur majors are specified in the majors.

Majors - choose 80 credit points from one primary Business major. These are testamur majors.

Use the links below to see the list of Core, Professional and Major units required for each B Bus Major. Students should follow the recommended sequence listed under each Bachelor of Engineering (Honours) program via the links above and not the recommended sequence listed under each B Bus Major.

Majors for Careers in Money

| MT2021.1 | Applied Finance |
| MT2022.1 | Economics |

Majors for Careers in Markets

MT2023.1	Hospitality Management
MT2025.1	International Business
MT2027.1	Marketing
MT2029.1	Sport Management

Majors for Careers in Management

| MT2024.1 | Human Resource Management |
| MT2026.1 | Management |

Bachelor of Engineering Advanced (Honours)

3690.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

The Bachelor of Engineering Advanced (Honours) is a four year honours degree program with common first year structure. The program has been designed to meet Engineers Australia professional accreditation requirements. Students have the opportunity to focus on a discipline area by selecting a key program in Civil, Construction, Electrical, Mechanical, and Robotic & Mechatronic engineering. In addition, students can specialise by selecting a sub-major from a wide range of recommended unit sets that will complement their chosen discipline. Honours class will be awarded at completion of four years of study, based on the overall academic performance during the study period. Students in this program will need to maintain at least credit average GPA throughout their study; those not meeting this academic performance requirement will be transferred to Bachelor of Engineering (Honours) program.

Study Mode
Four years full-time study or eight years part-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation
Graduates of this program are eligible to apply for full membership of Engineers Australia. They are eligible to apply for Chartered Professional Engineering registration upon successful completion of required engineering practice period specified by Engineers Australia.

Admission
Recommended studies: Physics and HSC Mathematics Extension 1 or HSC Mathematics Extension 2.

Assumed knowledge required: Two units of Science, two units of English and Mathematics at Band 5 or higher.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Academic Course Advisor
Dr Xinqun Zhu is the Academic Course Advisor for Key Programs in Civil and Construction.

Dr Jamal Rizk is the Academic Course Advisor for Key Program in Electrical.

Dr Jonathan Vincent is the Academic Course Advisor for Key Programs in Mechanical and Robotics & Mechatronics.

Recommended Sequence
Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Full-time

Year 1

Autumn session

| 200237.4 | Mathematics for Engineers 1 |

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 51

300027.2	Engineering Computing
300963.1	Engineering Physics
300964.1	Introduction to Engineering Practice

Spring session

200238.2	Mathematics for Engineers 2
300021.2	Electrical Fundamentals
300463.2	Fundamentals of Mechanics
300965.1	Engineering Materials

Year 2 - Year 4

Students must then select one of the following key programs

KT3118.1	Civil
KT3119.1	Construction
KT3120.1	Electrical
KT3140.1	Mechanical
KT3141.1	Robotics and Mechatronics

Bachelor of Engineering Science

3691.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

The Bachelor of Engineering Science is a three year degree program with common first year structure. Students have the opportunity to focus on a discipline area by selecting a key program in Civil, Construction, Electrical, Mechanical, and Robotic & Mechatronic engineering. The program has been developed with the view of enabling graduates to practice as an engineering technologist in their chosen field. The three year Bachelor of Engineering Science program may be used as a pathway to the four year Bachelor of Engineering program that meet Engineers Australia professional accreditation requirements; an academic performance criteria will be the eligibility criteria for such transfer.

Study Mode
Three years full time or six years part-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission

Recommended studies: Physics and HSC Mathematics.

Assumed Knowledge: Two units of Science, two units of English and Mathematics (not General Mathematics) at Band 4 or higher.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Academic Course Advisor

Dr Xinqun Zhu is the Academic Course Advisor for Key Programs in Civil and Construction.

Dr Jamal Rizk is the Academic Course Advisor for Key Program in Electrical.

Dr Jonathan Vincent is the Academic Course Advisor for Key Programs in Mechanical and Robotics & Mechatronics.

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Full-time - Autumn Intake

Year 1

Autumn session

300743.2	Mathematics for Engineers Preliminary
300027.2	Engineering Computing
300963.1	Engineering Physics
300964.1	Introduction to Engineering Practice

Spring session

200237.4	Mathematics for Engineers 1
300021.2	Electrical Fundamentals
300463.2	Fundamentals of Mechanics
300965.1	Engineering Materials

Year 2 - Year 3

Students must then select one of the following key programs

KT3123.1	Civil
KT3124.1	Construction
KT3125.1	Electrical
KT3142.1	Mechanical
KT3127.1	Robotics and Mechatronics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 52

Bachelor of Industrial Design

3730.1

This course replaces 3503 Bachelor of Industrial Design from 2016.

The Bachelor of Industrial design program prepares students for the profession with a new culture of learning supported by user/student-centered approach, competency learning, design studio-project based learning, applied design research and innovation. With a shorter time span between thinking and making, our new graduates in industrial design create and innovate by value adding, better experiences and interaction, products, businesses and systems. They are thinker-makers and design entrepreneurs, self-starters and all-rounders that can figure out and problem-solve ambiguity, work independently or in collaboration with others in new product development teams, user experience and interaction, product service systems, production and manufacturing.

The program provides an array of three majors (Graphics and Visualisation, Design Management and Entrepreneurship, and Design-Led Innovation and Management) and five sub-majors (Visualisation, Human Interaction, Industrial Manufacturing, Design Management, Responsible Design and Sustainability). The course pathway is transformative by practice on progressive priorities of product, process, people and place. Students are required to undertake a major and sub-major from different streams to complete the course. The course culminates in a final year industrial design project intending to develop visionary work leading to industry placement, Masters or PhD research.

Common occupations for industrial designers are in technological innovation (i.e. electronic, construction and building, medical and scientific), durable and fast moving consumer goods (i.e. commercial and domestics appliances, white goods, food, tools, packaging), entertainment and games (i.e. games development, model making, film and animation), online and e-learning solutions (i.e. web design, e-commerce, flexible learning), user-centered design (i.e. user experience, graphic user interface, natural user interface, tangible interaction, human computer interaction, human machine interaction, visualization and simulation), and traditional product and manufacturing (i.e. CAD/CAM, Rapid Prototyping, tooling). Graduates are eligible for membership of the Design Institute of Australia (DIA).

Study Mode
Four years full-time or eight years part-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation
Graduates are eligible for membership of the Design Institute of Australia (DIA)

Admission
Students applying to the Bachelor of Industrial Design should have an 65 ATAR.

Assumed knowledge of any two units of English plus at least two units of Business Studies, Visual Arts, Physics and Mathematics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

To be eligible to graduate from this course, students are required to complete a sub-major from the list below.

Year 1

Autumn session

301030.1	Introduction to Industrial Design Methods
300016.2	Design Science
301073.1	Design Studio 1: Patterns and Products
301074.1	Graphics 1: 2D and 3D Industrial Design Communication

Spring session

301075.1	Design Studio 2: Form and Production
301076.1	Graphics 2: Visual Simulation
301095.1	Sustainable Design 1: Materials and Technology
301077.1	Mathematics for Industrial Design

Year 2

Autumn session

301078.1	Design Studio 3: Design, Process and Function
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation
300570.3	Human-Computer Interaction

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 53

And one Major/Sub-major Alternate unit or Elective

Spring session

301080.1	Design Studio 4: Innovation through Systems Thinking
301081.2	Sustainable Design 2: Product Service Systems
301082.1	Design Management 2: Operation and Supply Chain

And one Major/Sub-major Alternate unit or Elective

Year 3

Autumn session

301083.1	Design Studio 5: Symbol and Meaning Making
300014.3	Design Management 3: Organisational Skills for Designers

And two Major/Sub-major Alternate units or Electives

Spring session

301084.1	Design Studio 6: Ambience, Place and Behaviour
301090.1	Contextual Inquiry

And two Major/Sub-major Alternate units or Electives

Industrial Experience

300775.2	Industrial Experience

Year 4

Autumn session

300459.2	Major Project Commencement

And two Alternate units - selected based on final year theme/issue in consultation with the Unit Coordinator.

Spring session

300460.2	Major Project Completion

And one Alternate unit - selected based on final year theme/issue in consultation with the Unit Coordinator.

Majors and Sub-Majors

The Bachelor of Industrial Design is offered on Penrith (Kingswood) Campus only. Students may be required to travel between campuses in order to complete some units within specific majors and sub-majors.

Majors

M3091.1	Visualisation and Graphics
M3092.1	Design Management and Entrepreneurship
M3093.1	Design-led Innovation and Management

Sub-majors

SM3084.1	Visualisation
SM3085.1	Human-Computer Interaction
SM3086.1	Industrial Manufacturing
SM3087.1	Design Management
SM3088.1	Responsible Design and Sustainability

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Bachelor of Industrial Design (Honours)

3731.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

The Bachelor of Industrial design program prepares students for the profession with a new culture of learning supported by user/student-centered approach, competency learning, design studio-project based learning, applied design research and innovation. With a shorter time span between thinking and making, our new graduates in industrial design create and innovate by value adding, better experiences and interaction, products, businesses and systems. They are thinker-makers and design entrepreneurs, self-starters and all-rounders that can figure out and problem-solve ambiguity, work independently or in collaboration with others in new product development teams, user experience and interaction, product service systems, production and manufacturing.

The program provides an array of three majors (Graphics and Visualisation, Design Management and Entrepreneurship, and Design-Led Innovation and Management) and five sub-majors (Visualisation, Human Interaction, Industrial Manufacturing, Design Management, Responsible Design and Sustainability). The course pathway is transformative by practice on progressive priorities of product, process, people and place. Students are required to undertake a major and sub-major from different streams to complete the course. The course culminates in a final year industrial design project intending to develop visionary work leading to industry placement, Masters or PhD research.

Common occupations for industrial designers are in technological innovation (i.e. electronic, construction and building, medical and scientific), durable and fast moving consumer goods (i.e. commercial and domestics appliances, white goods, food, tools, packaging), entertainment and games (i.e. games development, model making, film and animation), online and e-learning solutions (i.e. web design, e-commerce, flexible learning), user-centered design (i.e. user experience, graphic user interface, natural user interface, tangible interaction, human computer interaction, human machine interaction, visualization and simulation), and traditional product and manufacturing (i.e. CAD/CAM, Rapid Prototyping, tooling). Graduates are eligible for membership of the Design Institute of Australia (DIA).

Study Mode

Four years full-time or eight years part-time.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 54

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Accreditation

Graduates are eligible for membership of the Design Institute of Australia (DIA)

Admission

Students applying to Bachelor of Industrial Design (Honours) should do so with 70 ATAR.

Assumed knowledge of any two units of English plus at least two units of Business Studies, Visual Arts, Physics and Mathematics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

To be eligible to graduate from this course, students are required to complete a sub-major from the list below.

Year 1

Autumn session

301030.1	Introduction to Industrial Design Methods
300016.2	Design Science
301073.1	Design Studio 1: Patterns and Products
301074.1	Graphics 1: 2D and 3D Industrial Design Communication

Spring session

301075.1	Design Studio 2: Form and Production
301076.1	Graphics 2: Visual Simulation
301095.1	Sustainable Design 1: Materials and Technology
301077.1	Mathematics for Industrial Design

Year 2

Autumn session

301078.1	Design Studio 3: Design, Process and Function
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation
300570.3	Human-Computer Interaction

And one Major/Sub-major Alternate unit or Elective

Spring session

301080.1	Design Studio 4: Innovation through Systems Thinking
301081.2	Sustainable Design 2: Product Service Systems
301082.1	Design Management 2: Operation and Supply Chain

And one Major/Sub-major Alternate unit or Elective

Year 3

Autumn session

301083.1	Design Studio 5: Symbol and Meaning Making
300014.3	Design Management 3: Organisational Skills for Designers

And two Major/Sub-major Alternate units or Electives

Spring session

301084.1	Design Studio 6: Ambience, Place and Behaviour
301090.1	Contextual Inquiry

And two Major/Sub-major Alternate units or Electives

Industrial Experience

300775.2	Industrial Experience

Year 4

Autumn session

300773.2	Industrial Design Project (Commencement)

And one Alternate units - selected based on final year theme/issue in consultation with the Unit Coordinator

Spring session

300774.2	Industrial Design Project (Completion)

Majors and Sub-majors

The Bachelor of Industrial Design (Honours) is offered on Penrith (Kingswood) Campus only. Students may be required to travel between campuses in order to complete some units within specific majors and sub-majors.

Majors

M3091.1	Visualisation and Graphics
M3092.1	Design Management and Entrepreneurship

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 55

M3093.1	Design-led Innovation and Management

Sub-majors

SM3084.1	Visualisation
SM3085.1	Human-Computer Interaction
SM3086.1	Industrial Manufacturing
SM3087.1	Design Management
SM3088.1	Responsible Design and Sustainability

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Bachelor of Information and Communications Technology

3639.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

The Bachelor of Information and Communications Technology is a three year course accredited by the Australian Computer Society. It provides graduates with skills and knowledge in networking and IT applications development, along with the ability to apply practical ICT solutions in real-world situations. Units available offer a solid foundation across several domains including Networking, Databases, Systems Analysis & Design, Programming, Web and Mobile Technologies, Project Management, Professional Communications, Operating Systems and Human Computer Interaction. It also covers the necessary mathematical and statistical skills as needed by an ICT practitioner. The structure of the Course provides scope for electives, sub-majors or majors in further studies including the areas of Mobile Computing and Application Development, Entertainment Computing, Astroinformatics, Health Informatics, Social Media Analytics, Networking, Health Information Management, Mathematics, Statistics, Systems Security and IT Support. NB: Majors/ sub-majors may not be offered on all campuses.

Study Mode

Three years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal
Penrith Campus	Full Time	Internal

Accreditation

On completion of this Course graduates will be eligible for professional membership of the Australian Computer Society.

Admission

Assumed knowledge required: HSC Mathematics and any two units of HSC English

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Full-time Start Year Intake

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300700.5	Statistical Decision Making

Spring session

300565.2	Computer Networking
300581.4	Programming Techniques
300104.4	Database Design and Development

And one elective

Year 2

Autumn session

300582.3	Technologies for Web Applications
300095.4	Computer Networks and Internets
300144.4	Object Oriented Analysis

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 56

And one elective

Spring session

300583.2	Web Systems Development
300958.2	Social Web Analytics

And two electives

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.4	Operating Systems Programming

And one elective

Spring session

300579.5	Professional Experience

And three electives

Full-Time Mid Year Intake

Year 1

Spring session

300565.2	Computer Networking
300104.4	Database Design and Development
300700.5	Statistical Decision Making

Please Note: 300700 Statistical Decision Making is only offered in Autumn. Students in full time mid-year are required to enrol in the equivalent unit 200032 Statistics for Business.

And one elective

Autumn session

300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design
300095.4	Computer Networks and Internets
100483.2	Principles of Professional Communication 1

Year 2

Spring session

300581.4	Programming Techniques
300958.2	Social Web Analytics

And two electives

Autumn session

300582.3	Technologies for Web Applications
300578.3	Professional Development
300144.4	Object Oriented Analysis
300570.3	Human-Computer Interaction

Year 3

Spring session

300583.2	Web Systems Development

And three electives

Autumn session

300579.5	Professional Experience
300698.4	Operating Systems Programming

And two electives

Electives for majors and sub-majors

Please note: Majors and sub-majors are optional.

Majors

M3068.1	Entertainment Computing
M3097.1	Health Informatics
M3054.1	Mathematics
M3074.1	Mobile Computing
M3070.1	Networking

Sub-majors

SM3080.1	Astroinformatics
SM3052.1	Entertainment Computing
SM3090.1	Health Informatics
SM3054.1	IT Support
SM3025.1	Mathematics
SM3057.1	Mobile Computing
SM3055.1	Networking
SM3053.1	Social Media Analytics
SM3089.1	Statistics
SM3077.1	Systems Security
SM3056.1	Web Application Development (for Computing Students)

The following majors and sub-majors are only available to undergraduate students enrolled in other Western Sydney University courses. Students in the Bachelor of Information and Communications Technology should choose from the list of optional majors and sub-majors above.

M3002.1	Information Technology
M3003.1	Web Systems Development
SM3078.1	Web Application Development (for Non-Computing Students)
SM3058.1	Mobile Application Development (for Non-Computing Students only)

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points).

Western Sydney University offers majors and sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Information and Communications Technology (Advanced)

3684.2

Students should follow the course structure for the course version relevant to the year they commenced. This version

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 57

applies to students whose commencement year in this course is 2014 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

The Bachelor of Information and Communications Technology (Advanced) is a challenging course that includes advanced coursework, extension project and basic research training. A mentoring program will link the student with experienced academic staff and research groups within the University. This professional ICT course cultivates capable ICT graduates for the high end of ICT professions. This course provides graduates with a comprehensive skill set and knowledge base in networking and IT applications areas of ICT and the ability to apply practical solutions across ICT. It allows students to develop considerable skills in application development (including mobile app development), program design, systems analysis & design, networks, web-design, and the implementation of technology. These attributes can be conceptually grouped into the knowledge and skills necessary to:

The Bachelor of Information and Communications Technology (Advanced) is a three year ICT course with accreditation by the Australian Computer Society being sought. It provides a solid foundation in Networks, Databases, Systems Analysis & Design, Programming, Web Technologies, Project Management, Professional Communications and Operating Systems. It also covers the necessary mathematical and statistical skills, and basic research training as needed by a high end ICT practitioner.

Study Mode
Three years full time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal
Penrith Campus	Full Time	Internal

Accreditation
The Bachelor of Information and Communications Technology (Advanced) is accredited with the Australian Computer Society (ACS) at Professional level.

Admission
Assumed knowledge - HSC Mathematics and any two units of HSC English.

Minimum ATAR of 90. Students must maintain a Grade Point Average (GPA) greater than 5.0 to continue their enrolment in this course.

International applicants must have a overall IELTS score of 6.5 with a minimum 6.0 in each subtest

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the

Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
Students within the Advanced degree are required to complete five Advanced units.

Compulsory Advanced units

- 300903 Programming Techniques (Advanced)
- 300902 Web Systems Development (Advanced)
- 300900 Professional Experience (Advanced)

A further two units to be chosen from

- 300946 Computer Networking (Advanced)
- 300888 Object Oriented Analysis (Advanced)
- 300941 Database Design and Development (Advanced)
- 300901 Human-Computer Interaction (Advanced)
- 300943 Operating Systems Programming (Advanced)

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300700.5	Statistical Decision Making

Spring session

300903.1	Programming Techniques (Advanced)

Choose one of

300565.2	Computer Networking
300946.1	Computer Networking (Advanced)

Choose one of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 58

300104.4	Database Design and Development
300941.1	Database Design and Development (Advanced)

And one elective

Year 2

Autumn session

300582.3	Technologies for Web Applications
300095.4	Computer Networks and Internets

Choose one of

300144.4	Object Oriented Analysis
300888.1	Object Oriented Analysis (Advanced)

And one elective

Spring session

300958.2	Social Web Analytics
300902.1	Web Systems Development (Advanced)

And two electives

Year 3

Autumn session

300578.3	Professional Development

Choose one of

300698.4	Operating Systems Programming
300943.1	Operating Systems Programming (Advanced)

Choose one of

300570.3	Human-Computer Interaction
300901.1	Human-Computer Interaction (Advanced)

And one elective

Spring session

300900.1	Professional Experience (Advanced)

And three electives

Majors and Sub-majors

All current Majors and Sub-majors available to course 3639 Bachelor of Information and Communications Technology are also available to those enrolled in course 3684.2 - Bachelor of Information and Communications Technology (Advanced).

Please see list below.

Majors

M3068.1	Entertainment Computing
M3097.1	Health Informatics
M3054.1	Mathematics
M3074.1	Mobile Computing
M3070.1	Networking

Sub-majors

SM3080.1	Astroinformatics

SM3052.1	Entertainment Computing
SM3090.1	Health Informatics
SM3054.1	IT Support
SM3025.1	Mathematics
SM3057.1	Mobile Computing
SM3055.1	Networking
SM3053.1	Social Media Analytics
SM3089.1	Statistics
SM3077.1	Systems Security
SM3056.1	Web Application Development (for Computing Students)

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students in Advanced courses may use elective units toward obtaining an additional approved sub-major in Applied Leadership or Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Information and Communications Technology (Health Information Management)

3711.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2015 or later.

The increasing use of electronic health records requires the accurate and efficient capture, maintenance, security and reporting of health information and the Bachelor of Information Commnications Technology (Health Information Management) course will provide students with the knowledge and skills required to build software systems and undertake roles relating to the classification, coding and management of health information within a healthcare setting.

This Course will offer students the opportunity to seek employment in health information management and/or clinical coding, recognised as workforce skills shortage areas .Specific content areas addressed include Health Informatics, Systems Analysis and Design, Medical Terminology, Database Design and Development, Healthcare Data Environments, Clinical Classification and Coding, Programming, Web Development, Computer Networking, Health Service Management, Activity Based Funding and Data Quality and Healthcare Software and Systems.

The course also offers direct industry experience via a 20 day work placement.

Study Mode
Three years full-time or six years part-time.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 59

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Multi Modal
Campbelltown Campus	Part Time	Multi Modal
Parramatta Campus	Full Time	Multi Modal
Parramatta Campus	Part Time	Multi Modal
Penrith Campus	Full Time	Multi Modal
Penrith Campus	Part Time	Multi Modal

Accreditation

The Bachelor of Information and Communications Technology (Health Information Management) is accredited with the Australian Computer Society (ACS) at Professional level. Applications for accreditation by the Health Information Management Association of Australia (HIMAA) will be submitted in 2015. Successful certification will see graduates eligible for professional accreditation status with both bodies.

Admission

Applicants may be regarded as eligible for admission if they have completed the NSW HSC and attained the required ATAR (Australian Tertiary Admission Rank), or have completed other equivalent qualifications such as a recognised Diploma or Advanced Diploma.

Recognition of prior learning may be considered for applicants with Certificate III or Certificate IV in conjunction with relevant industry experience.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300700.5	Statistical Decision Making

Spring session

300565.2	Computer Networking
300581.4	Programming Techniques
300104.4	Database Design and Development
300566.2	Introduction to Health Informatics

Year 2

Autumn session

300582.3	Technologies for Web Applications
300095.4	Computer Networks and Internets
300144.4	Object Oriented Analysis
300950.2	Fundamentals of Medical Concepts and Terminology

Spring session

300583.2	Web Systems Development
300958.2	Social Web Analytics
300955.1	Healthcare Data Environments
400277.4	Health Services Management

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300951.2	Clinical Classification and Coding
400787.2	Health Services Management Practice

Spring session

300579.5	Professional Experience
300956.1	Healthcare Software and Systems
300953.1	Advanced Clinical Classification
300954.1	Activity Based Funding/Casemix and Data Quality

Bachelor of Information and Communications Technology/Bachelor of Arts

3654.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2014 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 60

studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This double degree program is designed in recognition of the globalising nature of the information technology industry. In addition to providing a strong technical background in IT, the course also provides students the necessary knowledge in majors in the Bachelor of Arts (BA): International Relations and Asian Studies; Cultural and Social Analysis; English; History and Political Thought; Philosophy; Chinese; Japanese, Arabic and Indonesian.

In the IT area, the program allows students to develop skills in application development, program design, systems analysis and design, networks, web-design, and the implementation of technology.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Information and Communications Technology is currently accredited with the Australian Computer Society (ACS) at Professional level.

Admission
Assumed knowledge required: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
Qualification for this award requires the successful completion of 320 credit points as specified in the structure below.

Students who complete this award will graduate with a Bachelor of Information and Communications Technology and a Bachelor of Arts.

The conceptual design of this BICT/BA double degree is as follows.

In Years 1 to 3 students will complete 160cp of Bachelor of Information and Communications Technology units as listed in the course structure below.

In Years 1 to 4 they will complete the 4 BA core units, an 8 unit BA major and a 4 unit BA sub-major from the majors and sub-majors in the Bachelor of Arts as listed below. Students may need to travel between campuses to complete the Arts components of the course.

BA Majors

- M1059 Arabic
- M1060 Chinese
- M1052 Cultural and Social Analysis
- M1053 English
- M1054 History and Political Thought
- M1041 Indigenous Australian Studies
- M1093 Indonesian
- M1055 International Relations and Asian Studies
- M1062 Japanese
- M1058 Philosphy

BA Sub-majors

- SM1077 Arabic
- SM1078 Chinese
- SM1070 Cultural and Social Analysis
- SM1071 English
- SM1072 History and Political Thought
- SM1049 Indigenous Australian Studies
- SM1112 Indonesian
- SM1073 International Relations and Asian Studies
- SM1080 Japanese
- SM1076 Philosophy

Arts Units

For details of the relevant Arts units, refer to the current listing of Bachelor of Arts, course code 1706.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 61

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300700.5	Statistical Decision Making

Spring session

300565.2	Computer Networking
300581.4	Programming Techniques
300104.4	Database Design and Development

BA Core unit

Year 2

Autumn session

300582.3	Technologies for Web Applications
300144.4	Object Oriented Analysis
300095.4	Computer Networks and Internets

BA Core unit

Spring session

300583.2	Web Systems Development
300958.2	Social Web Analytics

BA Core unit

BA Major unit

Year 3

Autumn session

300570.3	Human-Computer Interaction
300578.3	Professional Development
300698.4	Operating Systems Programming

BA Core unit

Spring session

300579.5	Professional Experience

BA Major unit

BA Major unit

BA Sub-major unit

Year 4

Autumn session

BA Major unit

BA Major unit

BA Sub-major unit

BA Sub-major unit

Spring session

BA Major unit

BA Major unit

BA Major unit

BA Sub-major unit

Bachelor of Information and Communications Technology/ Bachelor of Business

3737.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

This double degree targets the wide application of information technology in Business. It provides students with a strong technical background in IT and Business. It allows students to develop skills in application development, program design, systems analysis & design, networks, web-design, and the implementation of technology.

This degree combines information technology with one of eight Majors

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Bankstown Campus	Full Time	Internal
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation
On completion of this Course graduates will be eligible for professional membership of the Australian Computer Society. Major MT2021 - Applied Finance satisfies the educational requirements for membership of the Financial Services Institute of Australasia (Finsia). Major MT2024 Human Resource Management - The School of Business will seek to have the Bachelor of Business (Human Resource Management) accredited with the Australian Human Resources Institute (AHRI). Major MT2025 - International Business satisfies the educational requirements for membership of the Australian Institute of Export. Major MT2027 - Marketing satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute (AMI).

Admission
Assumed knowledge: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 62

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 320 credit points as per the recommended sequence below.

Students who complete this award will graduate with a Bachelor of Information and Communications Technology and a Bachelor of Business, with the Major from the Bachelor of Business component of the course noted on their testamur.

Bachelor of Information and Communications Technology component

Students must complete 160 credit points of prescribed Bachelor of Information and Communications Technology units.

Business component

Core units (compulsory 40 credit points)

200909.1	Enterprise Law
200910.1	Financing Enterprises
200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership

Professional units (choose 40 credit points)

The professional units provide a focus on careers. Students are required to complete one unit from each of the four key focus areas: numeracy, career planning, innovation, and enterprise engagement, a total of 40 credit points. Students are advised to choose units that will support careers in one of three areas: Money (for majors in Applied Finance, Economics), Markets (for majors in Hospitality Management, International Business, Marketing, and Sport Management), Management (for majors in Human Resource Management, and Management). The professional units that are recommended for each of the Bachelor of Business testamur majors are specified in the majors.

Bachelor of Business Majors - choose 80 credit points from one primary Business major. These are testamur majors.

Majors for Careers in Money

| MT2021.1 | Applied Finance |
| MT2022.1 | Economics |

Majors for Careers in Markets

MT2023.1	Hospitality Management
MT2025.1	International Business
MT2027.1	Marketing
MT2029.1	Sport Management

Majors for Careers in Management

| MT2024.1 | Human Resource Management |
| MT2026.1 | Management |

Recommended Sequence

Use the links above to see the Core, Professional and Major units required for each B Bus Major. Students should follow the recommended sequence below and not the recommended sequence listed under each B Bus Major.

This progression pattern is highly recommended. Students progress through both degrees at the same pace, completing two units in each degree in each semester. Graduation after three years with either degree will be possible only if a student makes this decision at or before the end of Year 2 and amends their progression pattern as prescribed by an Academic Course Advisor.

Year 1

Autumn session

| 300585.2 | Systems Analysis and Design |
| 300580.2 | Programming Fundamentals |

BBus Core unit 1

BBus Core unit 2

Spring session

| 300104.4 | Database Design and Development |
| 300581.4 | Programming Techniques |

BBus Core unit 3

BBus Core unit 4

Year 2

Autumn session

| 300144.4 | Object Oriented Analysis |
| 300582.3 | Technologies for Web Applications |

BBus Professional unit 1

BBus Major unit 1

Spring session

| 300583.2 | Web Systems Development |
| 300565.2 | Computer Networking |

BBus Professional unit 2

BBus Major unit 2

Year 3

Autumn session

| 300095.4 | Computer Networks and Internets |
| 300570.3 | Human-Computer Interaction |

BBus Major unit 3

BBus Major unit 4

Spring session

| 300958.2 | Social Web Analytics |

BICT Pool Unit

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 63

BBus Major unit 5
BBus Major unit 6

Year 4

Autumn session

300578.3	Professional Development
300698.4	Operating Systems Programming

BBus Professional unit 3
BBus Major unit 7

Spring session

300579.5	Professional Experience

BICT Pool Unit
BBus Professional unit 4
BBus Major unit 8

BICT Pool Units

300916.2	Astroinformatics
300862.2	Video Games Development
300960.3	Mobile Applications Development
300143.3	Network Security
300166.2	Systems and Network Management
300957.1	Parallel and Distributed Computing
300111.2	Developing Web Applications with XML

Bachelor of Information and Communications Technology/Bachelor of Business (Accounting)

3738.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

This double degree program targets the wide application of information technology in Business and Commerce in Accounting. It provides students with a strong technical background in IT and Business and Commerce in Accounting. It allows students to develop skills in application development, program design, systems analysis & design, networks, web-design, and the implementation of technology. This degree combines information technology with knowledge required by professional Accountants.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Information and Communications Technology is accredited with the Australian Computer Society (ACS) at Professional level. Major MT2020

Accounting is accredited with CPA Australia, Chartered Accounting Australia and New Zealand (CAANZ) and the Institute of Public Accountants (IPA).

Admission
Assumed knowledge: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
Qualification for this award requires the successful completion of 320 credit points as per the recommended sequence below.

Students who complete this award will graduate with a Bachelor of Information and Communications Technology and a Bachelor of Business, with a Major in Accounting noted on their testamur.

Business component
Core units (compulsory 40 credit points)

200909.1	Enterprise Law
200910.1	Financing Enterprises
200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership

Professional units (choose 40 credit points)

The professional units provide a focus on careers. Students are required to complete one unit from each of the four key focus areas: numeracy and analytics, career planning, innovation, and enterprise engagement, a total of 40 credit points. The professional core units that are recommended for the Bachelor of Business (Accounting) major are specified in the major.

Bachelor of Business Accounting Major - choose 80 credit points from the Accounting major. This is a testamur major.

MT2020.1	Accounting

Accreditation Units
Students should note that in order to achieve accreditation with the CPA Australia, Chartered Accounting Australia and New Zealand (CA) and the Institute of Public Accountants

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 64

(IPA) they will need to complete the following additional four units (40 credit points) over and above the 320 credit points of this course.

200183.4 Law of Business Organisations
200187.3 Taxation Law
200488.3 Corporate Financial Management
200108.2 Contemporary Management Accounting

Recommended Sequence

Use the link above to see the Core, Professional and Major units required for each B Bus Accounting Major. Students should follow the recommended sequence below and not the recommended sequence listed under the B Bus Accounting Major.

Year 1

Autumn session

300585.2 Systems Analysis and Design
300580.2 Programming Fundamentals

BBus Core unit 1

BBus Core unit 2

Spring session

300104.4 Database Design and Development
300581.4 Programming Techniques

BBus Core unit 3

BBus Core unit 4

Year 2

Autumn session

300144.4 Object Oriented Analysis
300582.3 Technologies for Web Applications

BBus Professional unit 1

BBus Major unit 1

Spring session

300583.2 Web Systems Development
300565.2 Computer Networking

BBus Professional unit 2

BBus Major unit 2

Year 3

Autumn session

300095.4 Computer Networks and Internets
300570.3 Human-Computer Interaction

BBus Major unit 3

BBus Major unit 4

Spring session

300958.2 Social Web Analytics

BICT Pool Unit

BBus Major unit 5

BBus Major unit 6

Year 4

Autumn session

300578.3 Professional Development
300698.4 Operating Systems Programming

BBus Professional unit 3

BBus Major unit 7

Spring session

300579.5 Professional Experience

BICT Pool Unit

BBus Professional unit 4

BBus Major unit 8

BICT Pool Units

300916.2 Astroinformatics
300862.2 Video Games Development
300960.3 Mobile Applications Development
300143.3 Network Security
300166.2 Systems and Network Management
300957.1 Parallel and Distributed Computing
300111.2 Developing Web Applications with XML

Bachelor of Information Systems

3687.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2016 or later.

Today, practising professionals need to not only have knowledge and skills in computing, they also need to understand the context in which computer technology is applied in society, and be able to work collaboratively with people in all sorts of professions and industries. The Bachelor Information Systems degree integrates closely the applications of computing and information systems in a global business environment. You will work with organisations to design, develop, deploy and manage information systems through the application of computing technology. This course will help you carry out a real-life project where you will need to demonstrate you can design and develop an information system that solves a community-based problem.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Information Systems is accredited with the Australian Computer Society (ACS) at Professional Level.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 65

Admission

Assumed Knowledge: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Full-time - Start Year Intake

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300573.2	Information Systems in Context

Spring session

300565.2	Computer Networking
300104.4	Database Design and Development
200032.5	Statistics for Business

And one elective

Year 2

Autumn session

300582.3	Technologies for Web Applications
300570.3	Human-Computer Interaction

And two electives

Spring session

300569.2	Computer Security
300572.2	Information Systems Deployment and Management
300960.3	Mobile Applications Development

And one elective

Year 3

Autumn session

300578.3	Professional Development
300584.4	Emerging Trends in Information Systems

And two electives

Spring session

300579.5	Professional Experience
300961.2	Social Computing

And two electives

Full-time - Mid Year Intake

Year 1

Spring session

300565.2	Computer Networking
300104.4	Database Design and Development
300573.2	Information Systems in Context
200032.5	Statistics for Business

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design

And one elective

Year 2

Spring session

300569.2	Computer Security
300572.2	Information Systems Deployment and Management

And two electives

Autumn session

300582.3	Technologies for Web Applications
300570.3	Human-Computer Interaction

And two electives

Year 3

Spring session

300961.2	Social Computing
300960.3	Mobile Applications Development

And two electives

Autumn session

300579.5	Professional Experience
300578.3	Professional Development
300584.4	Emerging Trends in Information Systems

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 66

Full-time - Accelerated Pathway

Start Year 2.5 Year Accelerated Pathway with Summer sessions

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design

And one elective

Spring session

300565.2	Computer Networking
300573.2	Information Systems in Context

And two electives

Summer A session

300570.3	Human-Computer Interaction
300104.4	Database Design and Development

Year 2

Autumn session

300582.3	Technologies for Web Applications
200032.5	Statistics for Business

And two electives

Spring session

300569.2	Computer Security
300572.2	Information Systems Deployment and Management
300960.3	Mobile Applications Development
300961.1	Social Computing

Summer A session

300578.3	Professional Development

And one elective

Year 3

Autumn session

300584.4	Emerging Trends in Information Systems
300579.5	Professional Experience

And two electives

Full-time - Accelerated Pathway

Early Start 2.5 Year Accelerated Pathway with Summer sessions

Year 1

Summer A session

200032.5	Statistics for Business
300104.4	Database Design and Development

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300573.2	Information Systems in Context

Spring session

300565.2	Computer Networking
300572.2	Information Systems Deployment and Management

And two electives

Year 2

Summer A session

300570.3	Human-Computer Interaction

And one elective

Autumn session

300582.3	Technologies for Web Applications

And three electives

Spring session

300569.2	Computer Security
300960.3	Mobile Applications Development
300961.2	Social Computing

And one elective

Year 3

Summer A session

300578.3	Professional Development

And one elective

Autumn session

300579.5	Professional Experience
300584.4	Emerging Trends in Information Systems

Suggested Majors and Sub-majors

Majors

M3098.1	Big Data
M3068.1	Entertainment Computing
M3097.1	Health Informatics
M3054.1	Mathematics
M3074.1	Mobile Computing
M3070.1	Networking

Sub-majors

SM3052.1	Entertainment Computing
SM3090.1	Health Informatics
SM3025.1	Mathematics
SM3057.1	Mobile Computing
SM3055.1	Networking
SM3053.1	Social Media Analytics
SM3089.1	Statistics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 67

SM3001.1	Systems Administration
SM3077.1	Systems Security
SM3006.1	Web Application Development (for Computing Students)

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Information Systems Advanced

3688.1

This course replaces 3685.1 Bachelor of Computing (Information Systems) Advanced from 2014

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2014 or later.

This degree focuses on computing and information technology in the context of business. In addition to the generic content described for Bachelor of Information Systems, this course utilises advanced activities, extension projects, research training and hands on work on real business projects.

During this program you will have a mentor who will support and guide you throughout the degree. This program will also link you with experienced academic staff and industry partners who will provide you with continuous training and supervision. In addition you will be invited to join research groups which will allow you to take part in large research projects.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Information Systems Advanced is accredited with the Australian Computer Society (ACS) at Professional Level.

Admission
Assumed Knowledge: HSC Mathematics and any two units of HSC English

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable

proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Students within the Advanced degree are required to complete five Advanced units.

Compulsory Advanced units

- 300942.1 Emerging Trends in Information Systems (Advanced)
- 300900.1 Professional Experience (Advanced)

A further three units to be chosen from

- 300946.1 Computer Networking (Advanced)
- 300941.1 Database Design and Development (Advanced)
- 300901.1 Human-Computer Interaction (Advanced)
- 300903.1 Programming Techniques (Advanced)
- 300902.1 Web Systems Development (Advanced)

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Full-time - Start Year Intake

Year 1

Autumn session

300580.2	Programming Fundamentals
100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design
300573.2	Information Systems in Context

Spring session

| 200032.5 | Statistics for Business |

Choose one of

| 300565.2 | Computer Networking |
| 300946.1 | Computer Networking (Advanced) |

Choose one of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 68

300104.4	Database Design and Development
300941.1	Database Design and Development (Advanced)

And one elective

Year 2

Autumn session

300582.3	Technologies for Web Applications

Choose one of

300570.3	Human-Computer Interaction
300901.1	Human-Computer Interaction (Advanced)

And two electives

Spring session

300569.2	Computer Security
300572.2	Information Systems Deployment and Management
300960.3	Mobile Applications Development

And one elective

Year 3

Autumn session

300578.3	Professional Development
300942.2	Emerging Trends in Information Systems (Advanced)

And two electives

Spring session

300900.1	Professional Experience (Advanced)
300961.2	Social Computing

And two electives

Full-time - Mid Year Intake

Year 1

Spring session

300573.2	Information Systems in Context
200032.5	Statistics for Business
300580.2	Programming Fundamentals

And one elective

Autumn session

100483.2	Principles of Professional Communication 1
300585.2	Systems Analysis and Design

And two electives

Year 2

Spring session

300569.2	Computer Security
300572.2	Information Systems Deployment and Management

Choose one of

300104.4	Database Design and Development
300941.1	Database Design and Development (Advanced)

Choose one of

300565.2	Computer Networking
300946.1	Computer Networking (Advanced)

Autumn session

300582.3	Technologies for Web Applications

Choose one of

300570.3	Human-Computer Interaction
300901.1	Human-Computer Interaction (Advanced)

And two electives

Year 3

Spring session

300961.2	Social Computing
300960.3	Mobile Applications Development

And two electives

Autumn session

300900.1	Professional Experience (Advanced)
300578.3	Professional Development
300942.2	Emerging Trends in Information Systems (Advanced)

And one elective

Majors

Students please be advised that all Majors and submajors available to course 3687.1 - Bachelor of Information Systems are also available to those enrolled in course 3688.1 - Bachelor of Information Systems Advanced.

Please see link below for Majors and submajors available.

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students in Advanced courses may use elective units toward obtaining an additional approved sub-major in Applied Leadership or Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Honours) Mathematics

2711.1

The honours program encourages independence in learning and research, further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepen intellectual understanding in the major field of study and develop research skills. An

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 69

Honours degree is a recognised point of entry into postgraduate research studies at PhD level. If a career in industry is sought, Honours enables study to a more advanced level with a higher qualification. The course has the opportunity for direct commercial and industrial involvement with a diverse range of organisations through the provision of and joint supervision of research projects.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal

Admission
Admission requirements follow the recommendations and guidelines in the University's Honours Policy. The basic requirement is completion of a bachelors pass degree in which the advanced level units in a relevant field of study were completed at a grade point average of 5.0 or better.

Course Structure
Qualification for this award requires the successful completion of 80 credit points which includes three core units made up of an advanced topic unit in mathematics, a research proposal and seminar plus a thesis in mathematics.

Core Units

200411.2	Advanced Topics in Mathematics
200412.5	Research Proposal and Seminar
200413.3	Mathematics Honours Thesis

Associate Degree in Engineering

7022.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is Q3 2015 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Associate Degree in Engineering is a two year program (full-time) in Engineering designed for people who have workplace experience and wish to upgrade their qualifications in Engineering and possibly continue to the full Bachelor degree program.

The Associate Degree in Engineering has a common first year program for all engineering disciplines, exposing students to a wide range of experiences in the first year. In the second year students may choose from the key programs in Civil, Electrical, Mechanical or Robotics & Mechatronics. If students choose to apply to study in the Bachelor of Engineering or from 216, the Bachelor of Engineering (Honours) after graduating from the Associate Degree in Engineering they may be given advanced standing in up to 12 units.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
Two years full-time or four years part-time.

Admission
Applicants may be regarded as eligible for admission if they have completed the NSW HSC and attained the required ATAR (Australian Tertiary Admission Rank), or have completed other equivalent qualifications such as a recognised Certificate III or Certificate IV and vocational experience and attained the required entrance standard set for entry to the course. This may include bridging/preparatory courses, para-professional and other post-secondary qualifications.

Admission to the Associate Degree in Engineering also requires an applicant to have a minimum of three years industry experience or be a member in a suitable traineeship program.

Course Structure
Qualification for this award requires the successful completion of 160 credit points as per the recommended sequence below.

Recommended Sequence

Core Units

700112.2	Fundamentals for Engineering Studies (WSTC AssocD)
700106.2	Engineering Computing (WSTC AssocD)
700114.2	Introduction to Engineering Business Management (WSTC AssocD)
700149.2	Introduction to Engineering Practice (WSTC AssocD)
700103.2	Mathematics for Engineers Preliminary (WSTC AssocD)
700109.2	Engineering Management for Engineer Associates (WSTC AssocD)
700113.2	Fundamentals of Mechanics (WSTC AssocD)
700147.2	Engineering Materials (WSTC AssocD)
700101.2	Mathematics for Engineers 1 (WSTC AssocD)
700153.2	Engineering Physics (WSTC AssocD)
700118.2	Professional Practice for Engineer Associates (WSTC AssocD)
700104.2	Electrical Fundamentals (WSTC AssocD)
700110.2	Engineering Project (WSTC AssocD)

Students must also select one of the following key programs and successfully complete three units from ONE key program only.

KT7000.1	Civil
KT7001.1	Electrical
KT7002.1	Mechanical

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 70

KT7003.1   Robotics and Mechatronics

Bachelor of Construction Management (WSTC First Year Program)

7042.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is Term 1, 2016 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Construction Management degree. It presents students with a range of units covering the science, building and management aspects of construction management and aims to prepare students for study beyond the first year of the Bachelor of Construction Management degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Bachelor of Construction Management (WSTC First Year Program) will articulate into the Bachelor of Construction Management degree at Western Sydney university with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One year full-time (three terms) or two years part-time (six terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Construction Management. The course is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

- Completed an English unit in the NSW Higher School Certificate OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR

- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Construction Management) OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Course Structure
Qualification for this award requires the successful completion of the units listed below.

700126.1	Design Science (UWSC)
700150.1	Graphic Communication and Design (UWSC)
700154.1	Professional Competencies (UWSC)
700070.1	Building 1 (UWSC)
700071.1	Building 2 (UWSC)
700252.1	Enterprise Leadership (WSTC)
700254.1	Enterprise Law (WSTC)
700005.4	Accounting Information for Managers (WSTC)

Students must pass the following preparatory level units for which no advanced standing will be granted in the University degree program

700144.2	Foundation Physics 1 (WSTC Prep)
700056.3	Academic English (WSTC Prep)

Students must also pass the following non-award unit, which does not count for credit towards the Diploma

700167.2	Tertiary Study Skills in Construction Management (WSTC Prep)

Bachelor of Construction Management Extended (WSTC First Year Program)

7081.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is Term 1, 2016 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Construction Management degree. It presents students with a range of units covering the science, building and management aspects of construction management and aims to prepare students for study beyond the first year of the Bachelor of Construction Management degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 71

successfully complete the Bachelor of Construction Management Extended (WSTC First Year Program) will articulate into the Bachelor of Construction Management degree at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Inherent requirements
Inherent requirements will mirror the inherent requirements of the Bachelor of Construction Management.

Admission

Recent School Leavers
Completion of Year 12 with specified ATAR to be determined year by year.

Non-Credentialed Students
Australian Citizens and Permanent Residents either aged 18 years or over. Applicants who are 17 years of age will be eligible for an offer if they have completed the HSC or other Year 12 studies or equivalent.

Course Structure
Students are categorised into two Pathways. See individual links below for detailed course structure.

Local Recent School Leavers

A7051.1   WSTC Construction Management Extended Local Recent School Leavers

Non-Credentialed Applicants

A7053.1   WSTC Construction Management Extended Non-Credentialed Applicants

Bachelor of Construction Management Fast Track (WSTC First Year Program)

7094.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is Term 1, 2016 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Construction Management degree. It presents students with a range of units covering the science, building and management aspects of construction management and aims to prepare students for study beyond the first year of the Bachelor of Construction Management degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Bachelor of Construction Management Fast Track (WSTC First Year Program) will articulate into the Bachelor of Construction Management degree at Western Sydney University with up to one year equivalent of advanced standing.

This course is equivalent to the corresponding Diploma in Construction Management Fast Track and all students will graduate with a Diploma in Construction Management.

Study Mode
Eight months (two terms) full-time, 16 months (four terms) part-time.

Admission
The aim of the course is to prepare students for tertiary study in Construction Management. The Bachelor is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering the Bachelor are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Construction Management), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

This course is not available to International students.

Course Structure
Students must pass the following units

700126.2	Design Science (WSTC)
700150.2	Graphic Communication and Design (WSTC)
700154.2	Professional Competencies (WSTC)
700070.2	Building 1 (WSTC)
700071.2	Building 2 (WSTC)
700003.4	Management Dynamics (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 72

700004.3   Introduction to Business Law (WSTC)
700005.4   Accounting Information for Managers (WSTC)

Students must also pass the following non-award unit which does not count for credit towards this course.

700167.2   Tertiary Study Skills in Construction Management (WSTC Prep)

Bachelor of Engineering (WSTC First Year Program)

7033.1

This course replaces 7030 - Bachelor of Engineering Science (UWSC First Year Program) from 2014.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Bachelor of Engineering (WSTC First Year Program) is designed to engage students in and further prepare students for tertiary study in Engineering / Engineering Science and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. This course presents students with units from the first year of the Bachelor of Engineering, Bachelor of Engineering Science degree or from 2016, the Bachelor of Engineering (Honours). It aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering / Engineering Science / Engineering (Honours) degree. It is completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self-esteem that comes from prior achievement in a tertiary environment.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One year full-time or two years part-time.

Inherent requirements
Inherent requirements will flow from the inherent requirements of the Bachelor of Engineering or from 2016, the Bachelor of Engineering (Honours).

Admission
The aim of the course is to engage students in and further prepare students for tertiary study in Engineering. This course is accredited by the University, as principal, to enable its agent Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

- Completed an English unit in the NSW Higher School Certificate, or
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) or
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR

- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Assumed to have a background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Engineering Science), or
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Course Structure
Students must pass the following units

700100.3   Mathematics for Engineers Preliminary (WSTC)
700019.7   Mathematics for Engineers 1 (WSTC)
700024.2   Electrical Fundamentals (WSTC)
700018.2   Engineering Computing (WSTC)
700023.2   Fundamentals of Mechanics (WSTC)
700152.2   Engineering Materials (WSTC)
700148.2   Introduction to Engineering Practice (WSTC)
700151.2   Engineering Physics (WSTC)

Students must pass the following preparatory level units for which no advanced standing will be granted in the Western Sydney University degree program

700146.3   Mathematics 2 (WSTC Prep)
700145.2   Foundation Physics 2 (WSTC Prep)

Students must also pass the non-award unit below, which does not count for credit towards the Diploma

700169.2   Tertiary Study Skills in Engineering (WSTC Prep)

Bachelor of Engineering Extended (WSTC First Year Program)

7082.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2015 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Bachelor of Engineering (WSTC First Year Program) is designed to engage students in, and further prepare students for, tertiary study in Engineering / Engineering Science and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. This course presents students with units from the first year of the Bachelor of Engineering (Honours) or Bachelor of Engineering Science degree and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering (Honours) /

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 73

Engineering Science degrees. It is completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self-esteem that comes from prior achievement in a tertiary environment. The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

For more information on Western Sydney University, The College, please refer to their web site

Study Mode
One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission
Local Recent School Leavers:

Completion of Year 12 with specified ATAR to be determined year by year.

Non-Credentialed Students:

Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure
Students are categorised into two Pathways. See individual links below for detailed course structure.

Local Recent School Leavers

A7006.1	WSTC Engineering Extended Local Recent School Leavers

Non-Credentialed Applicants

A7008.1	WSTC Engineering Extended Non-Credentialed Applicants

Bachelor of Engineering Fast Track (WSTC First Year Program)

7095.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2016 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Bachelor of Engineering Fast Track (WSTC First Year Program) is designed to engage students in, and further prepare students for, tertiary study in Engineering / Engineering Science / Engineering (Honours) and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. This

course presents students with units from the first year of the Bachelor of Engineering (Honours) or Bachelor of Engineering Science degree. It aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering Science / Bachelor of Engineering (Honours) degree. It is completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self-esteem that comes from prior achievement in a tertiary environment. Students who successfully complete the Bachelor of Engineering Fast Track (WSTC First Year Program) will articulate into the Bachelor of Engineering (Honours) degree at Western Sydney University with up to one year equivalent of advanced standing.

Students who successfully complete the Bachelor of Engineering Fast Track (WSTC First Year Program) will articulate into the Bachelor of Engineering (Honours) degree at Western Sydney University with up to one year equivalent of advanced standing.

This course is equivalent to the corresponding Diploma in Engineering Fast Track and all students will graduate with a Diploma in Engineering.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
Eight months full-time or two years part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Engineering. The Bachelor is accredited by the University, as principal, to enable its agent (Western Sydney University, The College) to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering the Bachelor are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied.

Assumed to have a background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Engineering Science), OR

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 74

- ○ Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

This course is not available to International students.

Course Structure

Students must pass the following units

700100.3	Mathematics for Engineers Preliminary (WSTC)
700019.7	Mathematics for Engineers 1 (WSTC)
700024.2	Electrical Fundamentals (WSTC)
700018.2	Engineering Computing (WSTC)
700023.2	Fundamentals of Mechanics (WSTC)
700152.2	Engineering Materials (WSTC)
700148.2	Introduction to Engineering Practice (WSTC)
700151.2	Engineering Physics (WSTC)

Students must also pass the following non-award unit which does not count for credit towards this course.

700169.2	Tertiary Study Skills in Engineering (WSTC Prep)

Bachelor of Information and Communications Technology (Health Information Management) (WSTC FYP)

7105.1

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Information and Communications Technology (Health Information Management) degree. It presents students with a range of units included in the first year of the Bachelor of Information and Communications Technology (Health Information Management) degree and aims to prepare students for study beyond the first year of University study. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete this course will articulate into the Bachelor of Information and Communications Technology (Health Information Management) degree at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, the College, please refer to their website.

Study Mode

One year full-time (three terms) or two years part-time (six terms).

Inherent requirements

The College will apply the inherent requirements of the University degree.

Admission

The aim of the course is to prepare students for tertiary study in ICT Health Information Management and is accredited by the University, as principal, to enable its agent, Western Sydney University, The College, to produce

students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

- ○ Completed an English unit in the NSW Higher School Certificate OR
- ○ Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- ○ Passed the Western Sydney University, The College English test at IELTS 6.0 equivalent OR
- ○ Passed the Western Sydney University, The College Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Met other entry requirements such as:

- ○ An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Information and Communications Technology (Health Information Management) OR
- ○ Completed the Western Sydney University, The College Foundation Studies course with a Grade Point Average of 5.5 or higher.

Course Structure

Students must pass the following preparatory level units for which no advanced standing will be granted in the University degree program

700047.3	Programming Design (WSTC Prep)
700045.3	Statistics for Academic Purposes (WSTC Prep)

Students must pass the following core University level units

700008.3	Programming Fundamentals (WSTC)
700040.3	Principles of Professional Communication 1 (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700041.6	Statistical Decision Making (WSTC)
700012.2	Computer Networking (WSTC)
700011.3	Database Design and Development (WSTC)
700257.1	Programming Techniques (WSTC)
700258.1	Introduction to Health Informatics (WSTC)

Students must also pass the non-award unit which does not count for credit towards the Diploma.

700171.2	Tertiary Study Skills in Information and Communications Technology

Bachelor of Information and Communications Technology (Health Information Management) Ext (WSTC FYP)

7107.1

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Information and Communications Technology (Health Information Management) degree. It presents students with a range of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 75

units included in the first year of the corresponding degree
and aims to prepare students for study beyond the first year
of University study. It is delivered in a smaller, more
supportive learning environment than usually found in first
year undergraduate programs. Students who successfully
complete this course will articulate into the Bachelor of
Information and Communications Technology (Health
Information Management) degree at Western Sydney
University with up to one year equivalent of advanced
standing.

For more information on Western Sydney University, The
College, please refer to their website.

Study Mode

One and a half years full-time (four terms) or three years
part-time (eight terms).

Inherent requirements

The College will apply the inherent requirements of the
University degree.

Admission

Recent School Leavers

Completion of Year 12 with specified ATAR to be
determined year by year.

Non-Credentialed Students

Australian Citizens and Permanent Residents either aged
18 years or over. Applicants who are 17 years of age will be
eligible for an offer if they have completed the HSC or other
Year 12 studies or equivalent.

Course Structure

Students are categorised into two Pathways. See individual
links below for detailed course structure.

Local recent school leavers

A7054.1	WSTC ICT (Health Information Management) Extended Local Recent School Leavers

Non-credentialed applicants

A7056.1	WSTC ICT (Health Information Management) Extended Non-Credentialed Applicants

Bachelor of Information and Communications Technology (WSTC First Year Program)

7041.1

Students should follow the course structure for the course
version relevant to the year they commenced. This version
applies to students whose commencement year in this
course is 2014 or later.

This course is delivered by Western Sydney University, The
College as an agent of Western Sydney University.

This program is designed to provide a tertiary level
foundation for further study in the Bachelor of Information
and Communications Technology and Bachelor of

Information Systems degrees. It has been constructed to
provide students with a sample of ICT units and university
experiences. Students who successfully complete this
course will articulate into Bachelor of Information and
Communications Technology degree at Western Sydney
University, The College with up to one year equivalent of
advanced standing. Students may also articulate into
Bachelor of Information Systems.

For more information on Western Sydney University, The
College, please refer to their web site.

Study Mode

One year full-time (three semesters) or two years part-time
(six semesters).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary
study in Information and Communications Technology or
Computing. The Diploma is accredited by the University, as
principal, to enable its agent, Western Sydney University,
The College to produce students who are fully prepared for
study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have

- Completed an English unit in the NSW Higher School Certificate, or
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) or
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed a
Mathematics subject, equivalent to the Mathematics subject
in the NSW Higher School Certificate.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Information Communications Technology or Computing), or
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Course Structure

Students must pass the following units

700040.3	Principles of Professional Communication 1 (WSTC)
700008.3	Programming Fundamentals (WSTC)
700000.3	Information Systems in Context (WSTC)
700011.3	Database Design and Development (WSTC)
700012.2	Computer Networking (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700039.2	Object Oriented Analysis (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 76

700007.5   Statistics for Business (WSTC)

or

700041.6   Statistical Decision Making (WSTC)

Students who wish to enter Bachelor of Information Systems on completion of this course will study 700007 Statistics for Business. Students intending to enter the Bachelor of Information and Communications Technology will study 700041 Statistical Decision Making (subject to student numbers).

Students must pass the following preparatory level units for which no advanced standing will be granted in the Western Sydney University degree program:

700045.3   Statistics for Academic Purposes (WSTC Prep)
700047.3   Programming Design (WSTC Prep)

Students must also pass the non-award uni 700171 Tertiary Study Skills in ICT (WSTC). This unit does not count for credit towards the Diploma.

700171.2   Tertiary Study Skills in Information and Communications Technology

Bachelor of Information and Communications Technology Extended (WSTC First Year Program)

7083.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2015 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide a tertiary level foundation for further study in the Bachelor of Information and Communications Technology and Bachelor of Information Systems degrees. It has been constructed to provide students with a sample of ICT units and university experiences. The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

Students who successfully complete the Bachelor of Information and Communications Technology Extended (WSTC First Year Program) will articulate into the Bachelor of Information and Communications Technology degree at Western Sydney University with up to one year equivalent of advanced standing. Students may also articulate into Bachelor of Information Systems.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal

Admission
Local Recent School Leavers:
Completion of Year 12 with specified ATAR to be determined year by year.

Non-Credentialed Students:
Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure
Students are categorised into two Pathways. See individual links below for detailed course structure.

Local Recent School Leavers

A7000.1   WSTC Information and Communications Technology Extended Local Recent School Leavers

Non-Credentialed Applicants

A7002.1   WSTC Information and Communications Technology Extended Non-Credentialed Applicants

Bachelor of Information and Communications Technology Fast Track (WSTC First Year Program)

7096.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2016 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide a tertiary level foundation for further study in the Bachelor of Information and Communications Technology and Bachelor of Information Systems degrees. It has been constructed to provide students with a sample of ICT units and university experiences. Students who successfully complete the Bachelor of Information and Communications Technology Fast Track (WSTC First Year Program) will articulate into the Bachelor of Information and Communications Technology degree at Western Sydney University, The College with up to one year equivalent of advanced standing. Students may also articulate into the Bachelor of Information Systems.

This course is equivalent to the corresponding Diploma in Information and Communications Technology Fast Track and all students will graduate with a Diploma in Information and Communications Technology.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 77

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
Eight months (two terms) full-time or 16 months (four terms) part-time.

Admission
The aim of the course is to prepare students for tertiary study in Information and Communications Technology or Computing. The Bachelor is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering the Bachelor are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.
- Passed either the Foundation Studies Commercial Mathematics unit or the Mathematics B unit offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Information Communications Technology or Computing), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

This course is not available to International students.

Course Structure
Students who wish to enter the Bachelor of Information Systems on completion of this course will study 700007 Statistics for Business (subject to student numbers). Students intending to enter the Bachelor of Information and Communications Technology will study 700041 Statistical Decision Making (subject to student numbers).

Students must pass the following units

700040.3	Principles of Professional Communication 1 (WSTC)
700008.3	Programming Fundamentals (WSTC)
700000.3	Information Systems in Context (WSTC)
700011.3	Database Design and Development (WSTC)
700012.2	Computer Networking (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700039.2	Object Oriented Analysis (WSTC)

Choose one of

700007.5	Statistics for Business (WSTC)

700041.6	Statistical Decision Making (WSTC)

Students must also pass the following non-award unit which does not count for credit towards this course.

700171.2	Tertiary Study Skills in Information and Communications Technology

Diploma in Construction Management

7015.6

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is Term 1, 2016 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Construction Management degree. It presents students with a range of units covering the science, building and management aspects of construction management and aims to prepare students for study beyond the first year of the Bachelor of Construction Management degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Diploma in Construction Management will articulate into the Bachelor of Construction Management degree at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One year full-time (three terms) or two years part-time (six terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Inherent requirements
Inherent requirements will mirror the inherent requirements of the Bachelor of Construction Management.

Admission
The aim of the course is to prepare students for tertiary study in Construction Management. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 78

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Construction Management) OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

International students must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have a background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Special Requirements
All students must complete Tertiary Study Skills with Western Sydney University, The College prior to completion of the Diploma.

Course Structure
Qualification for this award requires the successful completion of the units listed below.

700126.1	Design Science (UWSC)
700150.1	Graphic Communication and Design (UWSC)
700154.1	Professional Competencies (UWSC)
700070.1	Building 1 (UWSC)
700071.1	Building 2 (UWSC)

700252.1	Enterprise Leadership (WSTC)
700254.1	Enterprise Law (WSTC)
700005.4	Accounting Information for Managers (WSTC)

Students must pass the following preparatory level units for which no advanced standing will be granted in the University degree program:

700144.2	Foundation Physics 1 (WSTC Prep)
700056.3	Academic English (WSTC Prep)

Students must also pass the following non-award unit, which does not count for credit towards the Diploma:

700167.2	Tertiary Study Skills in Construction Management (WSTC Prep)

Diploma in Construction Management Extended

7065.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is Term 1, 2016 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Construction Management degree. It presents students with a range of units covering the science, building and management aspects of construction management and aims to prepare students for study beyond the first year of the Bachelor of Construction Management degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Diploma in Construction Management Extended will articulate into the Bachelor of Construction Management degree at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One and a half years full-time (four terms) or three years part-time (eight terms).

Inherent requirements
Inherent requirements will mirror the inherent requirements of the Bachelor of Construction Management.

Admission

Recent School Leavers

Completion of Year 12 with specified ATAR to be determined year by year.

International Students

IELTS 5.5 with minimum 5.0 in each sub band; or equivalent results from WSTC English Language Program

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 79

or WSTC English Entrance Test; and completion of year 11 or equivalent with specified results.

Non-Credentialed Students

Australian Citizens and Permanent Residents either aged 18 years or over. Applicants who are 17 years of age will be eligible for an offer if they have completed the HSC or other Year 12 studies or equivalent.

Course Structure

Students are categorised into three Pathways. See individual links below for detailed course structure.

Local Recent School Leavers

A7051.1 WSTC Construction Management Extended Local Recent School Leavers

International Students

A7052.1 WSTC Construction Management Extended International Students

Non-Credentialed Applicants

A7053.1 WSTC Construction Management Extended Non-Credentialed Applicants

Diploma in Construction Management Fast Track

7016.5

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2015 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Construction Management degree. It presents students with a range of units covering the science, building and management aspects of construction management and aims to prepare students for study beyond the first year of the Bachelor of Construction Management degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Diploma in Construction Management Fast Track will articulate into the Bachelor of Construction Management degree at Western Sydney University with up to one year equivalent of advanced standing.

Study Mode

Eight months (two terms)

Admission

The aim of the course is to prepare students for tertiary study in Construction Management. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Construction Management), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.
- Passed a Foundation Studies at Western Sydney University, The College Mathematics unit at C grade level or higher.

Students are also assumed to have a background in Mathematics at a senior high school level and assumed background in Science knowledge, preferably in Physics.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

Special Requirements

All students must complete Tertiary Study Skills with Western Sydney University, The College prior to completion of the Diploma.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 80

Course Structure

To be awarded the Diploma in Construction Management, student must pass the following units

700126.2	Design Science (WSTC)
700150.2	Graphic Communication and Design (WSTC)
700154.2	Professional Competencies (WSTC)
700070.2	Building 1 (WSTC)
700071.2	Building 2 (WSTC)
700003.4	Management Dynamics (WSTC)
700004.3	Introduction to Business Law (WSTC)
700005.4	Accounting Information for Managers (WSTC)

Students must also pass the non-award unit below, which does does not count for credit towards the Diploma.

700167.2	Tertiary Study Skills in Construction Management (WSTC Prep)

Diploma in Engineering

7034.1

This course replaces 7023 - Diploma in Engineering Science from 2014.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Diploma in Engineering is designed to engage students in, and further prepare students for, tertiary study in Engineering / Engineering Science and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. The Diploma presents students with units from the first year of the Bachelor of Engineering (Honours) or Bachelor of Engineering Science degrees. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering (Honours) / Engineering Science degrees. The Diploma, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self-esteem that comes from prior achievement in a tertiary environment.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode

One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Inherent requirements

Inherent requirements will flow from the inherent requirements of the Bachelor of Engineering or from 2016, the Bachelor of Engineering (Honours).

Admission

The aim of the course is to prepare students for tertiary study in Engineering. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Assumed to have a background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Engineering) or from 2016, the Bachelor of Engineering (Honours)), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

English Entry Requirements. International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Assumed to have background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Course Structure

Students must pass the following units

700100.3	Mathematics for Engineers Preliminary (WSTC)
700019.7	Mathematics for Engineers 1 (WSTC)
700024.2	Electrical Fundamentals (WSTC)
700018.2	Engineering Computing (WSTC)
700023.2	Fundamentals of Mechanics (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 81

700152.2   Engineering Materials (WSTC)
700148.2   Introduction to Engineering Practice (WSTC)
700151.2   Engineering Physics (WSTC)

Students must pass the following preparatory level units for which no advanced standing will be granted in the Western Sydney University degree program

700146.3   Mathematics 2 (WSTC Prep)
700145.2   Foundation Physics 2 (WSTC Prep)

Students must also pass the following non-award unit, which does not count for credit towards the Diploma

700169.2   Tertiary Study Skills in Engineering (WSTC Prep)

Diploma in Engineering Extended

7066.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2015 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Diploma in Engineering is designed to engage students in, and further prepare students for, tertiary study in Engineering / Engineering Science and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. The Diploma presents students with units from the first year of the Bachelor of Engineering (Honours) or Bachelor of Engineering Science degree and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering (Honours) / Engineering Science degree. It is completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self-esteem that comes from prior achievement in a tertiary environment. The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

Study Mode
One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Inherent requirements
The inherent requirements of the Bachelor of Engineering or from 2016, the Bachelor of Engineering (Honours) will apply to this course.

Admission
Local Recent School Leavers:

Completion of Year 12 with specified ATAR to be determined year by year.

International Students:

IELTS 5.5 with minimum 5.0 in each sub band; or equivalent results from either the English Language Program or English Entrance Test administered by Western Sydney University, The College.and completion of year 11 or equivalent with specified results.

Non-Credentialed Students:

Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure
Students are categorised into three Pathways. See individual links below for detailed course structure.

Local Recent School Leavers

A7006.1   WSTC Engineering Extended Local Recent School Leavers

International Students

A7007.1   WSTC Engineering Extended International Students

Non-Credentialed Applicants

A7008.1   WSTC Engineering Extended Non-Credentialed Applicants

Diploma in Engineering Fast Track

7035.1

This course replaces 7024 - Diploma in Engineering Science Fast Track from 2014.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Diploma in Engineering Fast Track is designed to engage students in, and further prepare students for, tertiary study in Engineering / Engineering Science and in so doing address any perceived deficiencies in the students' mathematical and physics knowledge and skills. The Diploma presents students with units from the first year of the Bachelor of Engineering Science degree or the Bachelor of Engineering (Honours). The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Engineering Science / Engineering (Honours) degree. The Diploma, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self-esteem that comes from prior achievement in a tertiary environment. Students who successfully complete the Diploma in Engineering Fast Track will articulate into the Bachelor of Engineering (Honours) at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 82

Study Mode
Eight months full-time (two terms) or two years part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Engineering. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, Or
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) Or
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent Or
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Assumed to have a background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Engineering Science), Or
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher

English Entry Requirements. International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band Or
- Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass Or
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent Or
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C gr.ade level or higher for which advanced standing can be applied for.

Assumed to have background in mathematics at senor high school level and assumed background Science knowledge, preferably in Physics.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement Or
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

Special Requirements
All students must complete Tertiary Study Skills with Western Sydney University, The College prior to completion of the diploma.

Course Structure
Students must pass the following units

700100.3	Mathematics for Engineers Preliminary (WSTC)
700019.7	Mathematics for Engineers 1 (WSTC)
700024.2	Electrical Fundamentals (WSTC)
700018.2	Engineering Computing (WSTC)
700023.2	Fundamentals of Mechanics (WSTC)
700152.2	Engineering Materials (WSTC)
700148.2	Introduction to Engineering Practice (WSTC)
700151.2	Engineering Physics (WSTC)

Students must also pass the following non-award unit , which does not count for credit towards the Diploma

700169.2	Tertiary Study Skills in Engineering (WSTC Prep)

Diploma in Information and Communications Technology

7005.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2014 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide a tertiary level foundation for further study in the Bachelor of Information and Communications Technology and Bachelor of Information Systems degrees. It has been constructed to provide students with a sample of ICT units and university experiences. Students who successfully complete the Diploma in Information and Communications Technology will articulate into Bachelor of Information and Communications Technology degree at UWS with up to one year equivalent of advanced standing. Students may also articulate into Bachelor Information Systems.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One year full-time (three terms)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 83

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Information and Communications Technology or Computing. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Information Communications Technology or Computing), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

- LTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR

- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Special Requirements

Students must complete Tertiary Study Skills with UWSCollege prior to completion of the diploma.

Course Structure

Students who wish to enter the Bachelor of Information Systems on completion of this Diploma course will, subject to student numbers, study 700007 Statistics for Business (UWSC). Students intending to enter the Bachelor of Information and Communications Technology will study 700041 Statistical Decision Making (UWSC).

Students must pass the following units

700040.3	Principles of Professional Communication 1 (WSTC)
700008.3	Programming Fundamentals (WSTC)
700000.3	Information Systems in Context (WSTC)
700011.3	Database Design and Development (WSTC)
700012.2	Computer Networking (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700039.2	Object Oriented Analysis (WSTC)

Choose one of

700007.5	Statistics for Business (WSTC)
700041.6	Statistical Decision Making (WSTC)

Students must pass the following preparatory level units for which no advanced standing will be granted in the Western Sydney University degree program

700045.3	Statistics for Academic Purposes (WSTC Prep)
700047.3	Programming Design (WSTC Prep)

Students must also pass the following non-award unit, which does not count for credit towards the Diploma

700171.2	Tertiary Study Skills in Information and Communications Technology

Diploma in Information and Communications Technology (Health Information Management)

7104.1

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Information and Communications Technology (Health Information Management) degree. It presents students with a range of units included in the first year of the corresponding degree and aims to prepare students for study beyond the first year of University study. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete this course will articulate into the Bachelor of Information and Communications Technology (Health Information Management) degree at Western Sydney

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 84

University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, the College, please refer to their website.

Study Mode

One year full-time (three terms), two years part-time (six terms).

Inherent requirements

The College will apply the inherent requirements of the University degree.

Admission

The aim of the course is to prepare students for tertiary study in ICT Health Information Management and is accredited by the University, as principal, to enable its agent, Western Sydney University, The College, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

- Completed an English unit in the NSW Higher School Certificate OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the Western Sydney University, The College English test at IELTS 6.0 equivalent OR
- Passed the Western Sydney University, The College Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Information and Communications Technology (Health Information Management) OR
- Completed the Western Sydney University, The College Foundation Studies course with a Grade Point Average of 5.5 or higher.

International students must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the Western Sydney University, The College EAP 4 course with a 50% pass OR
- Passed the Western Sydney University, The College English test at IELTS 6.0 equivalent OR
- Passed the Western Sydney University, The College Foundation Studies Academic English unit at C grade level or higher for which advanced standing can be applied for.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the Western Sydney University, The College Foundation Studies course with a Grade Point Average of 5.5 or higher.

Course Structure

Students must pass the following preparatory level units for which no advanced standing will be granted in the University degree program

700047.3	Programming Design (WSTC Prep)
700045.3	Statistics for Academic Purposes (WSTC Prep)

Students must pass the following core University level units

700008.3	Programming Fundamentals (WSTC)
700040.3	Principles of Professional Communication 1 (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700041.6	Statistical Decision Making (WSTC)
700012.2	Computer Networking (WSTC)
700011.3	Database Design and Development (WSTC)
700257.1	Programming Techniques (WSTC)
700258.1	Introduction to Health Informatics (WSTC)

Students must also pass the non-award unit which does not count for credit towards the Diploma.

700171.2	Tertiary Study Skills in Information and Communications Technology

Diploma in Information and Communications Technology (Health Information Management) Extended

7106.1

This course commences in Term 3 2016.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The program is designed to provide students with the first year units included in the Bachelor of Information and Communications Technology (Health Information Management) degree. It presents students with a range of units included in the first year of the corresponding degree and aims to prepare students for study beyond the first year of University study. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete this course will articulate into the Bachelor of Information and Communications Technology (Health Information Management) degree at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their website.

Study Mode

One and a half years full-time (four terms), three years part-time (eight terms).

Inherent requirements

The College will apply the inherent requirements of the University degree.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 85

Admission

Recent School Leavers

Completion of Year 12 with specified ATAR to be
determined year by year.

International Students

IELTS 5.5 with minimum 5.0 in each sub band; or
equivalent results from Western Sydney University, The
College English Language Program or Western Sydney
University, The College English Entrance Test; and
completion of year 11 or equivalent with specified results.

Non-Credentialed Students

Australian Citizens and Permanent Residents either aged
18 years or over. Applicants who are 17 years of age will be
eligible for an offer if they have completed the HSC or other
Year 12 studies or equivalent.

Course Structure

Students are categorised into three Pathways. See
individual links below for detailed course structure.

Local recent school leavers

A7054.1   WSTC ICT (Health Information
Management) Extended Local
Recent School Leavers

International students

A7055.1   WSTC ICT (Health Information
Management) Extended International
Students

Non-credentialed applicants

A7056.1   WSTC ICT (Health Information
Management) Extended Non-
Credentialed Applicants

Diploma in Information and
Communications Technology Extended

7067.1

Students should follow the course structure for the course
version relevant to the year they commenced. This version
applies to students whose commencement year in this
course is 2015 or later.

This course is delivered by Western Sydney University, The
College as an agent of Western Sydney University.

This program is designed to provide a tertiary level
foundation for further study in the Bachelor of Information
and Communications Technology and Bachelor of
Information Systems degrees. It has been constructed to
provide students with a sample of ICT units and university
experiences. The inclusion of additional preparatory units is
designed to assist students in the transition to study at
University level.

Students who successfully complete the Diploma in
Information and Communications Technology Extended will
articulate into Bachelor of Information and Communications
Technology degree at Western Sydney University with up
to one year equivalent of advanced standing. Students may
also articulate into Bachelor of Information Systems.

Study Mode

One and a half years full-time (four terms) or three years
part-time (eight terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal

Admission

Local Recent School Leavers:

Completion of Year 12 with specified ATAR to be
determined year by year.

International Students:

IELTS 5.5 with minimum 5.0 in each sub band; or
equivalent results from either the English Language
Program or English Entrance Test administered by Western
Sydney University, The College.and completion of year 11
or equivalent with specified results.

Non-Credentialed Students:

Australian Citizens and Permanent Residents either aged
18 years or over or completed Year 11 equivalent.

Course Structure

Students are categorised into three Pathways. See
individual links below for detailed course structure.

Local Recent School Leavers

A7000.1   WSTC Information and
Communications Technology
Extended Local Recent School
Leavers

International Students

A7001.1   WSTC Information and
Communications Technology
Extended International Students

Non-Credentialed Applicants

A7002.1   WSTC Information and
Communications Technology
Extended Non-Credentialed
Applicants

Diploma in Information and
Communications Technology Fast Track

7004.3

Students should follow the course structure for the course
version relevant to the year they commenced. This version
applies to students whose commencement year for this
course is 2014.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 86

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide a tertiary level foundation for further study in the Bachelor of Information and Communications Technology and Bachelor of Information Systems degrees. It has been constructed to provide students with a sample of ICT units and university experiences. Students who successfully complete the Diploma in Information and Communications Technology Fast Track will articulate into Bachelor of Information and Communications Technology degree at UWS with up to one year equivalent of advanced standing. Students may also articulate into Bachelor of Information Systems.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
Eight months full-time (two terms)

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal
The College - Nirimba Education Precinct	Full Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Information and Communications Technology or Computing. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

○ Completed an English unit in the NSW Higher School Certificate, OR

○ Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR

○ Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR

○ Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

○ Passed either the Foundation Studies Commercial Mathematics unit or the Mathematics B unit offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Met other entry requirements such as:

○ An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Information Communications Technology or Computing), OR

○ Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

○ IELTS 6.0 with a minimum 5.5 in each sub band OR

○ Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR

○ Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR

○ Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

○ Passed either the Foundation Studies Commercial Mathematics unit or the Mathematics B unit offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have completed a Mathematics subject, equivalent to the Mathematics subject in the NSW Higher School Certificate.

Academic Entry Requirements vary according to country of origin. However, in general:

○ Completion of Year 12 or its equivalent is the minimum entry requirement OR

○ Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

Special Requirements
Students must complete Tertiary Study Skills with UWSCollege prior to completion of the diploma.

Course Structure
Students who wish to enter the Bachelor of Information Systems on completion of this Diploma course will, subject to student numbers, study 700007 Statistics for Business (UWSC). Students intending to enter the Bachelor of Information and Communications Technology will, subject to student numbers, study 700041 Statistical Decision Making (UWSC).

Students must also pass the following seven units

700040.3	Principles of Professional Communication 1 (WSTC)	
700008.3	Programming Fundamentals (WSTC)	
700000.3	Information Systems in Context (WSTC)	
700011.3	Database Design and Development (WSTC)	
700012.2	Computer Networking (WSTC)	
700013.2	Systems Analysis and Design (WSTC)	
700039.2	Object Oriented Analysis (WSTC)	

Choose one of

700007.5	Statistics for Business (WSTC)
700041.6	Statistical Decision Making (WSTC)

Students must also pass the following non-award unit, which does not count for credit towards the Diploma

700171.2	Tertiary Study Skills in Information and Communications Technology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 87

Specialisations

UWSCollege Admission Pathway - WSTC Information and Communications Technology Extended Local Recent School Leavers

A7000.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7067 Diploma in Information and Communications Technology Extended or 7083 Bachelor of Information and Communications Technology Extended (WSTC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700198.2	Academic Communication 1 (WSTC Prep)
700205.2	Academic Skills for Information Communications Technology (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)
700206.2	Business Studies (WSTC Prep)
700199.2	Academic Communication 2 (WSTC Prep)
700047.3	Programming Design (WSTC Prep)
700045.3	Statistics for Academic Purposes (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)

University level Units

Students must pass the following University level units.

700040.3	Principles of Professional Communication 1 (WSTC)
700008.3	Programming Fundamentals (WSTC)
700000.3	Information Systems in Context (WSTC)
700011.3	Database Design and Development (WSTC)
700012.2	Computer Networking (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700039.2	Object Oriented Analysis (WSTC)
700041.6	Statistical Decision Making (WSTC)

UWSCollege Admission Pathway - WSTC Information and Communications Technology Extended International Students

A7001.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7067 Diploma in Information and Communications Technology Extended to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700207.2	English for Tertiary Study 1 (WSTC Prep)
700205.2	Academic Skills for Information Communications Technology (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)
700206.2	Business Studies (WSTC Prep)
700208.2	English for Tertiary Study 2 (WSTC Prep)
700047.3	Programming Design (WSTC Prep)
700045.3	Statistics for Academic Purposes (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)

University level Units

Students must pass the following University level units.

700040.3	Principles of Professional Communication 1 (WSTC)
700008.3	Programming Fundamentals (WSTC)
700000.3	Information Systems in Context (WSTC)
700011.3	Database Design and Development (WSTC)
700012.2	Computer Networking (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700039.2	Object Oriented Analysis (WSTC)
700041.6	Statistical Decision Making (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 88

UWSCollege Admission Pathway - WSTC Information and Communications Technology Extended Non-Credentialed Applicants

A7002.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7067 Diploma in Information and Communications Technology Extended or 7083 Bachelor of Information and Communications Technology Extended (WSTC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700209.2	Introduction to Academic Communication 1 (WSTC Prep)
700205.2	Academic Skills for Information Communications Technology (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)
700206.2	Business Studies (WSTC Prep)
700210.2	Introduction to Academic Communication 2 (WSTC Prep)
700047.3	Programming Design (WSTC Prep)
700045.3	Statistics for Academic Purposes (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)

University level Units

Students must pass the following University level units.

700040.3	Principles of Professional Communication 1 (WSTC)
700008.3	Programming Fundamentals (WSTC)
700000.3	Information Systems in Context (WSTC)
700011.3	Database Design and Development (WSTC)
700012.2	Computer Networking (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700039.2	Object Oriented Analysis (WSTC)
700041.6	Statistical Decision Making (WSTC)

UWSCollege Admission Pathway - WSTC Engineering Extended Local Recent School Leavers

A7006.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7066 Diploma in Engineering Extended or 7082 Bachelor of Engineering Extended (UWSC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700198.2	Academic Communication 1 (WSTC Prep)
700202.2	Academic Skills for Engineering (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700144.2	Foundation Physics 1 (WSTC Prep)
700203.2	Mathematics 3 (WSTC Prep)
700145.2	Foundation Physics 2 (WSTC Prep)
700204.2	Introductory Programming (WSTC Prep)

University Level Units

Students must pass the following University level units

700100.3	Mathematics for Engineers Preliminary (WSTC)
700019.7	Mathematics for Engineers 1 (WSTC)
700024.2	Electrical Fundamentals (WSTC)
700018.2	Engineering Computing (WSTC)
700023.2	Fundamentals of Mechanics (WSTC)
700152.2	Engineering Materials (WSTC)
700148.2	Introduction to Engineering Practice (WSTC)
700151.2	Engineering Physics (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 89

UWSCollege Admission Pathway - WSTC Engineering Extended International Students

A7007.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7066 Diploma in Engineering Extended to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700207.2	English for Tertiary Study 1 (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700204.2	Introductory Programming (WSTC Prep)
700144.2	Foundation Physics 1 (WSTC Prep)
700208.2	English for Tertiary Study 2 (WSTC Prep)
700203.2	Mathematics 3 (WSTC Prep)
700145.2	Foundation Physics 2 (WSTC Prep)

University level Units

Students must pass the following University level units

700100.3	Mathematics for Engineers Preliminary (WSTC)
700019.7	Mathematics for Engineers 1 (WSTC)
700024.2	Electrical Fundamentals (WSTC)
700018.2	Engineering Computing (WSTC)
700023.2	Fundamentals of Mechanics (WSTC)
700152.2	Engineering Materials (WSTC)
700148.2	Introduction to Engineering Practice (WSTC)
700151.2	Engineering Physics (WSTC)

UWSCollege Admission Pathway - WSTC Engineering Extended Non-Credentialed Applicants

A7008.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7066 Diploma in Engineering Extended or 7082 Bachelor of Engineering Extended (WSTC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700209.2	Introduction to Academic Communication 1 (WSTC Prep)
700202.2	Academic Skills for Engineering (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700144.2	Foundation Physics 1 (WSTC Prep)
700203.2	Mathematics 3 (WSTC Prep)
700145.2	Foundation Physics 2 (WSTC Prep)
700204.2	Introductory Programming (WSTC Prep)

University level Units

Students must pass the following University level units

700100.3	Mathematics for Engineers Preliminary (WSTC)
700019.7	Mathematics for Engineers 1 (WSTC)
700024.2	Electrical Fundamentals (WSTC)
700018.2	Engineering Computing (WSTC)
700023.2	Fundamentals of Mechanics (WSTC)
700152.2	Engineering Materials (WSTC)
700148.2	Introduction to Engineering Practice (WSTC)
700151.2	Engineering Physics (WSTC)

UWSCollege Admission Pathway - WSTC Construction Management Extended Local Recent School Leavers

A7051.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7065 Diploma in Construction Management Extended or 7081 Bachelor of Construction

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 90

Management Extended (WSTC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700198.2	Academic Communication 1 (WSTC Prep)
700200.2	Academic Skills for Construction Management (WSTC Prep)
700144.2	Foundation Physics 1 (WSTC Prep)
700199.2	Academic Communication 2 (WSTC Prep)
700046.3	Accounting Fundamentals (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)

University level Units

Students must pass the following University level units

700126.2	Design Science (WSTC)
700150.2	Graphic Communication and Design (WSTC)
700154.2	Professional Competencies (WSTC)
700070.2	Building 1 (WSTC)
700071.2	Building 2 (WSTC)
700252.1	Enterprise Leadership (WSTC)
700254.1	Enterprise Law (WSTC)
700005.4	Accounting Information for Managers (WSTC)

UWSCollege Admission Pathway - WSTC Construction Management Extended International Students

A7052.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7065 Diploma in Construction Management Extended to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700207.2	English for Tertiary Study 1 (WSTC Prep)
700200.2	Academic Skills for Construction Management (WSTC Prep)
700144.2	Foundation Physics 1 (WSTC Prep)
700208.2	English for Tertiary Study 2 (WSTC Prep)
700046.3	Accounting Fundamentals (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)

University Level Units

Students must pass the following University level units

700126.2	Design Science (WSTC)
700150.2	Graphic Communication and Design (WSTC)
700154.2	Professional Competencies (WSTC)
700070.2	Building 1 (WSTC)
700071.2	Building 2 (WSTC)
700252.1	Enterprise Leadership (WSTC)
700254.1	Enterprise Law (WSTC)
700005.4	Accounting Information for Managers (WSTC)

UWSCollege Admission Pathway - WSTC Construction Management Extended Non-Credentialed Applicants

A7053.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7065 Diploma in Construction Management Extended or 7081 Bachelor of Construction Management Extended (WSTC First Year Program) to complete this specialisation.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 91

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700209.2	Introduction to Academic Communication 1 (WSTC Prep)
700200.2	Academic Skills for Construction Management (WSTC Prep)
700144.2	Foundation Physics 1 (WSTC Prep)
700210.2	Introduction to Academic Communication 2 (WSTC Prep)
700046.3	Accounting Fundamentals (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)

University Level Units

Students must pass the following University level units

700126.2	Design Science (WSTC)
700150.2	Graphic Communication and Design (WSTC)
700154.2	Professional Competencies (WSTC)
700070.2	Building 1 (WSTC)
700071.2	Building 2 (WSTC)
700252.1	Enterprise Leadership (WSTC)
700254.1	Enterprise Law (WSTC)
700005.4	Accounting Information for Managers (WSTC)

UWSCollege Admission Pathway - WSTC ICT (Health Information Management) Extended Local Recent School Leavers

A7054.1

Location

Campus	Mode
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7106 Diploma in Information and Communications Technology (Health Information Management) Extended or 7107 Bachelor of Information and Communications Technology (Health Information Management) Ext (WSTC FYP) to complete this specialisation.

Students must pass the following preparatory level units for which no advanced standing will be granted in the University degree program.

Students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units.

700198.2	Academic Communication 1 (WSTC Prep)

700199.2	Academic Communication 2 (WSTC Prep)
700205.2	Academic Skills for Information Communications Technology (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700047.3	Programming Design (WSTC Prep)
700045.3	Statistics for Academic Purposes (WSTC Prep)
700259.1	Advanced Computer Studies (WSTC Prep)

Students must pass the following core University level units.

700008.3	Programming Fundamentals (WSTC)
700040.3	Principles of Professional Communication 1 (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700041.6	Statistical Decision Making (WSTC)
700012.2	Computer Networking (WSTC)
700011.3	Database Design and Development (WSTC)
700257.1	Programming Techniques (WSTC)
700258.1	Introduction to Health Informatics (WSTC)

UWSCollege Admission Pathway - WSTC ICT (Health Information Management) Extended International Students

A7055.1

Location

Campus	Mode
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7106 Diploma in Information and Communications Technology (Health Information Management) Extended to complete this specialisation.

Students must pass the following preparatory level units for which no advanced standing will be granted in the University degree program.

Students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units.

700207.2	English for Tertiary Study 1 (WSTC Prep)
700208.2	English for Tertiary Study 2 (WSTC Prep)
700205.2	Academic Skills for Information Communications Technology (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700047.3	Programming Design (WSTC Prep)
700045.3	Statistics for Academic Purposes (WSTC Prep)
700259.1	Advanced Computer Studies (WSTC Prep)

Students must pass the following core University level units.

700008.3	Programming Fundamentals (WSTC)
700040.3	Principles of Professional Communication 1 (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 92

700013.2	Systems Analysis and Design (WSTC)
700041.6	Statistical Decision Making (WSTC)
700012.2	Computer Networking (WSTC)
700011.3	Database Design and Development (WSTC)
700257.1	Programming Techniques (WSTC)
700258.1	Introduction to Health Informatics (WSTC)

UWSCollege Admission Pathway - WSTC ICT (Health Information Management) Extended Non-Credentialed Applicants

A7056.1

Location

Campus	Mode
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7106 Diploma in Information and Communications Technology (Health Information Management) Extended or 7107 Bachelor of Information and Communications Technology (Health Information Management) Ext (WSTC FYP) to complete this specialisation.

Students must pass the following preparatory level units for which no advanced standing will be granted in the University degree program.

Students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units.

700209.2	Introduction to Academic Communication 1 (WSTC Prep)
700210.2	Introduction to Academic Communication 2 (WSTC Prep)
700205.2	Academic Skills for Information Communications Technology (WSTC Prep)
700201.2	Computer Studies (WSTC Prep)
700146.3	Mathematics 2 (WSTC Prep)
700047.3	Programming Design (WSTC Prep)
700045.3	Statistics for Academic Purposes (WSTC Prep)
700259.1	Advanced Computer Studies (WSTC Prep)

Students must pass the following core University level units.

700008.3	Programming Fundamentals (WSTC)
700040.3	Principles of Professional Communication 1 (WSTC)
700013.2	Systems Analysis and Design (WSTC)
700041.6	Statistical Decision Making (WSTC)
700012.2	Computer Networking (WSTC)
700011.3	Database Design and Development (WSTC)
700257.1	Programming Techniques (WSTC)
700258.1	Introduction to Health Informatics (WSTC)

Key Program - Civil

KT3118.1

Civil engineering covers the fields of structural design, geotechnical engineering and water engineering, together with infrastructure design and environmental engineering. Graduates will work in the fields of design, construction and management of engineering structures. Projects may cover residential and commercial buildings, highways and airports, water supply and sewerage schemes, etc. You may be an engineer in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 2

Autumn session

300738.3	Surveying for Engineers
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300985.1	Soil Mechanics

Spring session

300984.1	Pavement Materials and Design
300733.2	Introduction to Structural Engineering
300737.4	Environmental Engineering
300765.2	Hydraulics

Year 3

Autumn session

300732.2	Structural Analysis
300983.1	Surface Water Hydrology
300736.2	Concrete Structures (UG)
300666.2	Advanced Engineering Topic 1

Spring session

300730.2	Steel Structures
301001.1	Engineering Geomechanics
300971.1	Engineering Project 1
300667.2	Advanced Engineering Topic 2

Industrial Experience

| 300741.2 | Industrial Experience (Engineering) |

Year 4

Autumn session

| 300972.1 | Engineering Project 2 |

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 93

300969.1   Advanced Engineering Thesis 1: Preliminary
Investigations

And one Alternate unit

And one elective unit

* Elective units must be Level 2 or higher

Spring session

300982.1   Transportation Engineering
300488.4   Numerical Methods in Engineering
300970.1   Advanced Engineering Thesis 2: Detailed
Investigations

And one Alternate unit

Alternate Units

300986.1   Applied Mechanics
300987.1   Composite Structures
300988.1   Highway Infrastructure
300989.1   Hydrogeology
300990.1   Pile Foundations
300991.1   Statistical Hydrology
300798.1   Sustainability and Risk Engineering
300739.2   Timber Structures (UG)
300994.1   Waste Management
300992.1   Water and Wastewater Treatment
300993.1   Water Resource Engineering

Optional Elective

The following unit is an optional elective unit offered to
students who are engaged in a School approved project.
This unit can be taken during the third year of this course,
however, permission is required to enrol in the unit.

301089.1   Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional
approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of
areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via
MySR.

Key Program - Construction

KT3119.1

The Construction Key Program consists of core subjects in
structural engineering, project management and
construction technologies. Graduates will work in the fields
of construction, structural design, and project management.
Career opportunities include those in the private or public
sector on projects covering highways, airports, and
residential & commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 2

Autumn session

300738.3   Surveying for Engineers
300040.2   Mechanics of Materials
200486.3   Quantity Surveying 1
300985.1   Soil Mechanics

Spring session

300984.1   Pavement Materials and Design
300733.2   Introduction to Structural Engineering
200468.2   Estimating 1
300707.2   Building 2

Year 3

Autumn session

300732.2   Structural Analysis
300728.2   Construction Planning
300736.2   Concrete Structures (UG)
300666.2   Advanced Engineering Topic 1

Spring session

300730.2   Steel Structures
300727.2   Project Management
300971.1   Engineering Project 1
300667.2   Advanced Engineering Topic 2

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 4

Autumn session

300972.1   Engineering Project 2
300798.1   Sustainability and Risk Engineering
300969.1   Advanced Engineering Thesis 1: Preliminary
Investigations

And one Alternate unit

Spring session

301001.1   Engineering Geomechanics
300970.1   Advanced Engineering Thesis 2: Detailed
Investigations

And one Alternate unit

And one elective unit

*Elective units must be level 2 or higher

Alternate Units

300986.1   Applied Mechanics
300987.1   Composite Structures
300988.1   Highway Infrastructure
300990.1   Pile Foundations

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 94

300739.2   Timber Structures (UG)

Optional Elective

The following unit is an optional elective unit offered to
students who are engaged in a School approved project.
This unit can be taken during the third year of this course,
however, permission is required to enrol in the unit.

301089.1   Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional
approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of
areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via
MySR.

Key Program - Electrical

KT3120.1

This program includes core subjects from all branches of
electrical engineering. Graduates will work in the fields of
electronic components, computers, electro-magnetics,
power generation and distribution systems, power and
control in public utilities, telecommunications,
manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 2

Autumn session

300005.2	Circuit Theory
300025.3	Electronics
300057.4	Signals and Systems
300018.2	Digital Systems 1

Spring session

300076.3	Microprocessor Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines
300009.3	Control Systems

Year 3

Autumn session

300007.2	Communication Systems
300071.2	Electrical Machines 1
300666.2	Advanced Engineering Topic 1

And one elective unit*

*Elective units must be level 2 or higher

Spring session

300771.1	Power Systems
300069.3	Digital Signal Processing
300971.1	Engineering Project 1
300667.2	Advanced Engineering Topic 2

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4

Autumn session

300972.1	Engineering Project 2
300772.1	Power Electronics
300969.1	Advanced Engineering Thesis 1: Preliminary Investigations

And one Alternate unit

Spring session

300075.4	Instrumentation and Measurement
300070.4	Electrical Drives
300970.1	Advanced Engineering Thesis 2: Detailed Investigations

And one Alternate unit

Alternate Units

300997.1	Data Communications
300019.4	Digital Systems 2
300029.3	Engineering Visualization
300995.1	Power Quality
300489.2	Radio and Satellite Communication
300996.1	Smart Grids and Distributed Generation
300998.1	Sustainable Energy Systems
300065.4	Wireless Communications

Optional Elective

The following unit is an optional elective unit offered to
students who are engaged in a School approved project.
This unit can be taken during the third year of this course,
however, permission is required to enrol in the unit.

301089.1   Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional
approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of
areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via
MySR.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 95

Key Program - Civil

KT3123.1

Civil engineering covers the fields of structural design, geotechnical engineering and water engineering, together with infrastructure design and environmental engineering. Graduates will work in the fields of design, construction and management of engineering structures. Projects may cover residential and commercial buildings, highways and airports, water supply and sewerage schemes, etc. You may be an engineer in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 2

Autumn session

300738.3	Surveying for Engineers
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300985.1	Soil Mechanics

Spring session

300984.1	Pavement Materials and Design
300733.2	Introduction to Structural Engineering
300737.4	Environmental Engineering
300765.2	Hydraulics

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300732.2	Structural Analysis
300736.2	Concrete Structures (UG)
300967.1	Engineering Science Project 1

And one elective unit

*Elective units must be Level 2 or higher

Spring session

300730.2	Steel Structures
300982.1	Transportation Engineering
300968.1	Engineering Science Project 2

And one elective unit

*Elective units must be Level 2 or higher

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Construction

KT3124.1

The Construction Key Program consists of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, and project management. Career opportunities include those in the private or public sector on projects covering highways, airports, and residential & commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 2

Autumn session

300738.3	Surveying for Engineers
300040.2	Mechanics of Materials
200486.3	Quantity Surveying 1
300985.1	Soil Mechanics

Spring session

300984.1	Pavement Materials and Design
300733.2	Introduction to Structural Engineering
200468.2	Estimating 1
300707.2	Building 2

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300732.2	Structural Analysis

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 96

300728.2	Construction Planning
300967.1	Engineering Science Project 1

And one elective unit

*Elective units must be Level 2 or higher

Spring session

300730.2	Steel Structures
300727.2	Project Management
300968.1	Engineering Science Project 2

And one elective unit

*Elective units must be level 2 or higher

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Electrical

KT3125.1

This program includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 2

Autumn session

300005.2	Circuit Theory
300025.3	Electronics
300057.4	Signals and Systems
300018.2	Digital Systems 1

Spring session

300076.3	Microprocessor Systems

300481.2	Engineering Electromagnetics
300052.2	Power and Machines
300009.3	Control Systems

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300007.2	Communication Systems
300071.2	Electrical Machines 1
300967.1	Engineering Science Project 1

And one elective unit

*Elective units must be level 2 or higher

Spring session

300771.1	Power Systems
300069.3	Digital Signal Processing
300968.1	Engineering Science Project 2

And one elective unit

*Elective units must be level 2 or higher

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Robotics and Mechatronics

KT3127.1

This program provides the skills necessary for the design of smart machines of all types: cruise control in automobiles, pilotless spacecraft, automated factories and medical telerobotics. The course, accompanied by an extensive and integrated hands-on laboratory program, is essentially concerned with the design of intelligent mechanical systems and automation, and includes the study of robotics, computer control, automated manufacturing, microprocessor applications and machine design. Graduates in the program acquire the combined skills of mechanical and computer/electrical engineering that are needed in leading-edge industries such as aerospace systems, the car industry, automation and robotic applications, biomedical engineering, laser systems, and building materials manufacture.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 97

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 2

Autumn session

300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300005.2	Circuit Theory
300018.2	Digital Systems 1

Spring session

300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300052.2	Power and Machines
300044.2	Microcontrollers and PLCs

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 3

Autumn session

300764.1	Mechanical Design
300763.1	Advanced Dynamics
300056.4	Robotics
300967.1	Engineering Science Project 1

Spring session

300043.4	Mobile Robotics
300968.1	Engineering Science Project 2

And two elective units

* Elective units must be level 2 or higher

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Civil

KT3135.1

Civil engineering covers the fields of structural design, geotechnical engineering and water engineering, together with infrastructure design and environmental engineering. Graduates will work in the fields of design, construction and management of engineering structures. Projects may cover residential and commercial buildings, highways and airports, water supply and sewerage schemes, etc. You may be an engineer in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Bachelor of Engineering (Honours) programs have a common first year structure.

Students choose their key program at the end of first year. Civil engineering students will undertake the units listed below.

Full-time Autumn Intake

Year 2

Autumn session

300738.3	Surveying for Engineers
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300985.1	Soil Mechanics

Spring session

300984.1	Pavement Materials and Design
300733.2	Introduction to Structural Engineering
300737.4	Environmental Engineering
300765.2	Hydraulics

Year 3

Autumn session

300732.2	Structural Analysis
300983.1	Surface Water Hydrology
300736.2	Concrete Structures (UG)

And one Alternate unit

Spring session

300730.2	Steel Structures
301001.1	Engineering Geomechanics
300488.4	Numerical Methods in Engineering

And one Alternate unit

Industrial Experience

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 98

300741.2   Industrial Experience (Engineering)

Year 4

Autumn session

300971.1   Engineering Project 1
300973.1   Engineering Thesis 1: Preliminary Investigations

And one Alternate unit

And one Elective unit

*Elective units must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary unit)

Spring session

300982.1   Transportation Engineering
300972.1   Engineering Project 2
300974.1   Engineering Thesis 2: Detailed Investigations

And one Alternate unit

Alternate Units

Alternate units may be used to complete one of the Specialisation sub-majors listed below.

300986.1   Applied Mechanics
300987.1   Composite Structures
300988.1   Highway Infrastructure
300989.1   Hydrogeology
300990.1   Pile Foundations
300991.1   Statistical Hydrology
300798.1   Sustainability and Risk Engineering
300739.2   Timber Structures (UG)
300994.1   Waste Management
300992.1   Water and Wastewater Treatment
300993.1   Water Resource Engineering

Specialisation Sub-majors

SM3065.1   Structures
SM3066.1   Geotechnical
SM3067.1   Water and Environment

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1   Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Construction

KT3136.1

The Construction Key Program consists of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, and project management. Career opportunities include those in the private or public sector on projects covering highways, airports, and residential & commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Bachelor of Engineering (Honours) programs have a common first year structure.

Students choose their key program at the end of first year. Construction engineering students will undertake the units listed below.

Full-time Autumn Intake

Year 2

Autumn session

300738.3   Surveying for Engineers
300040.2   Mechanics of Materials
200486.3   Quantity Surveying 1
300985.1   Soil Mechanics

Spring session

300984.1   Pavement Materials and Design
300733.2   Introduction to Structural Engineering
200468.2   Estimating 1
300707.2   Building 2

Year 3

Autumn session

300732.2   Structural Analysis
300728.2   Construction Planning
300736.2   Concrete Structures (UG)

And one Alternate unit

Spring session

300730.2   Steel Structures
300727.2   Project Management

And one Alternate unit

And one Elective unit

*Elective units must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary unit)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 99

Industrial Experience

| 300741.2 | Industrial Experience (Engineering) |

Year 4

Autumn session

300971.1	Engineering Project 1
300798.1	Sustainability and Risk Engineering
300973.1	Engineering Thesis 1: Preliminary Investigations

And one Alternate unit

Spring session

301001.1	Engineering Geomechanics
300972.1	Engineering Project 2
300974.1	Engineering Thesis 2: Detailed Investigations

And one Alternate unit

Alternate Units

Alternate units may be used to complete one of the
Specialisation sub-majors listed below.

300986.1	Applied Mechanics
300987.1	Composite Structures
300988.1	Highway Infrastructure
300990.1	Pile Foundations
300739.2	Timber Structures (UG)

Specialisation Sub-majors

| SM3065.1 | Structures |
| SM3068.1 | Construction Economics |

Optional Elective

The following unit is an optional elective unit offered to
students who are engaged in a School approved project.
This unit can be taken during the third year of this course,
however, permission is required to enrol in the unit.

| 301089.1 | Special Technical Project |

Sub-major elective spaces

Elective units may be used toward obtaining an additional
approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of
areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via
MySR.

Key Program - Electrical

KT3137.1

This program includes core subjects from all branches of
electrical engineering. Graduates will work in the fields of
electronic components, computers, electro-magnetics,
power generation and distribution systems, power and

control systems in public utilities, telecommunications,
manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Bachelor of Engineering (Honours) programs have a
common first year structure.

Students choose their key program at the end of first year.
Electrical engineering students will undertake the units
listed below.

Full-time - Autumn Intake

Year 2

Autumn session

300005.2	Circuit Theory
300025.3	Electronics
300057.4	Signals and Systems
300018.2	Digital Systems 1

Spring session

300076.3	Microprocessor Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines
300009.3	Control Systems

Year 3

Autumn session

| 300007.2 | Communication Systems |
| 300071.2 | Electrical Machines 1 |

And one Alternate unit

And one Elective unit*

*Elective units must be level 2 or higher (an exception
applies for students completing Mathematics for Engineers
Preliminary unit)

Spring session

300771.1	Power Systems
300069.3	Digital Signal Processing
300070.4	Electrical Drives

And one Alternate unit

Industrial Experience

| 300741.2 | Industrial Experience (Engineering) |

Year 4

Autumn session

300971.1	Engineering Project 1
300772.1	Power Electronics
300973.1	Engineering Thesis 1: Preliminary Investigations

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 100

And one Alternate unit

Spring session

300972.1	Engineering Project 2
300075.4	Instrumentation and Measurement
300974.1	Engineering Thesis 2: Detailed Investigations

And one Alternate unit

Alternate Units

Alternate units may be used to complete one of the Specialisation sub-majors listed below.

401140.1	Biomechanics
301122.1	Biomedical Electronics
301121.1	Biomedical Signals and Data Analysis
300997.1	Data Communications
300019.4	Digital Systems 2
300029.3	Engineering Visualization
300361.3	Introduction to Human Biology
300995.1	Power Quality
300489.2	Radio and Satellite Communication
300996.1	Smart Grids and Distributed Generation
300998.1	Sustainable Energy Systems
300065.4	Wireless Communications

Specialisation Sub-majors

SM3069.1	Telecommunications
SM3070.1	Power Engineering
SM3091.1	Biomedical Engineering

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Mechanical

KT3138.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Examples include mechanical and machinery design; manufacturing; energy production; and marketing and management activities. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Bachelor of Engineering (Honours) programs have a common first year structure.

Students choose their key program at the end of first year. Mechanical engineering students will undertake the units listed below.

Full-time - Autumn Intake

Year 2

Autumn session

300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation

Spring session

300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Year 3

Autumn session

300764.1	Mechanical Design
300763.1	Advanced Dynamics

And one Alternate unit

And one Elective unit*

*Elective units must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary unit)

Spring session

300759.1	Thermal and Fluid Engineering
300488.4	Numerical Methods in Engineering
300487.3	Mechatronic Design

And one Alternate unit

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4

Autumn session

300971.1	Engineering Project 1
300056.4	Robotics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 101

300973.1	Engineering Thesis 1: Preliminary Investigations

And one Alternate unit

Spring session

300972.1	Engineering Project 2
301000.1	Computer Aided Engineering
300974.1	Engineering Thesis 2: Detailed Investigations

And one Alternate unit

Alternate Units

Alternate units may be used to complete one of the Specialisation sub-majors listed below.

401140.1	Biomechanics
301122.1	Biomedical Electronics
301121.1	Biomedical Signals and Data Analysis
300999.1	Computational Fluid Dynamics
301076.1	Graphics 2: Visual Simulation
301091.1	Graphics 4: Kinetic Narratives
300570.3	Human-Computer Interaction
300361.3	Introduction to Human Biology
300044.2	Microcontrollers and PLCs
300043.4	Mobile Robotics
301081.2	Sustainable Design 2: Product Service Systems

Specialisation Sub-majors

SM3072.1	Automation
SM3092.1	Computer Aided Design (Mechanical)
SM3091.1	Biomedical Engineering

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Robotics and Mechatronics

KT3139.1

This program provides the skills necessary for the design of smart machines of all types: cruise control in automobiles, pilotless spacecraft, automated factories and medical telerobotics. The course, accompanied by an extensive and integrated hands-on laboratory program, is essentially concerned with the design of intelligent mechanical systems and automation, and includes the study of robotics, computer control, automated manufacturing, microprocessor applications and machine design. Graduates in the program acquire the combined skills of mechanical and computer/electrical engineering that are needed in leading-edge industries such as aerospace systems, the car industry, automation and robotic applications, biomedical engineering, laser systems, and building materials manufacture.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Bachelor of Engineering (Honours) programs have a common first year structure.

Students choose their key program at the end of first year. Robotics and Mechatronics engineering students will undertake the units listed below.

Full-time - Autumn Intake

Year 2

Autumn session

300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300005.2	Circuit Theory
300018.2	Digital Systems 1

Spring session

300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300052.2	Power and Machines
300044.2	Microcontrollers and PLCs

Year 3

Autumn session

300764.1	Mechanical Design
300763.1	Advanced Dynamics
300025.3	Electronics

And one Alternate unit

Spring session

300043.4	Mobile Robotics
300487.3	Mechatronic Design

And one Alternate unit

And one Elective unit

* Elective units must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary unit)

Industrial Experience

300741.2	Industrial Experience (Engineering)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 102

Year 4

Autumn session

300971.1	Engineering Project 1
300056.4	Robotics
300973.1	Engineering Thesis 1: Preliminary Investigations

And one Alternate unit

Spring session

300972.1	Engineering Project 2
300075.4	Instrumentation and Measurement
300974.1	Engineering Thesis 2: Detailed Investigations

And one Alternate unit

Alternate Units

Alternate units may be used to complete one of the Specialisation sub-majors listed below.

401140.1	Biomechanics
301122.1	Biomedical Electronics
301121.1	Biomedical Signals and Data Analysis
300999.1	Computational Fluid Dynamics
301000.1	Computer Aided Engineering
300029.3	Engineering Visualization
300762.2	Fluid Mechanics
301076.1	Graphics 2: Visual Simulation
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation
300361.3	Introduction to Human Biology
300759.1	Thermal and Fluid Engineering
300760.1	Thermodynamics and Heat Transfer

Specialisation Sub-majors

SM3093.1	Computer Aided Design (Mechatronics)
SM3074.1	Thermal and Fluid Systems
SM3091.1	Biomedical Engineering

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Mechanical

KT3140.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Examples include mechanical and machinery design; manufacturing; energy production; and marketing and management activities. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students choose their key program at the end of first year. Mechanical engineering students will then undertake the following units.

Full-time Autumn Intake

Year 2

Autumn session

300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation

Spring session

300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Year 3

Autumn session

300764.1	Mechanical Design
300763.1	Advanced Dynamics
300666.2	Advanced Engineering Topic 1

And one Elective unit

* Elective units must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary unit)

Spring session

300759.1	Thermal and Fluid Engineering
300488.4	Numerical Methods in Engineering

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 103

300971.1	Engineering Project 1
300667.2	Advanced Engineering Topic 2

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4

Autumn session

300972.1	Engineering Project 2
300056.4	Robotics
300969.1	Advanced Engineering Thesis 1: Preliminary Investigations

And one Alternate unit

Spring session

301000.1	Computer Aided Engineering
300487.3	Mechatronic Design
300970.1	Advanced Engineering Thesis 2: Detailed Investigations

And one Alternate unit

Alternate Units

300999.1	Computational Fluid Dynamics
301076.1	Graphics 2: Visual Simulation
301091.1	Graphics 4: Kinetic Narratives
300570.3	Human-Computer Interaction
300044.2	Microcontrollers and PLCs
300043.4	Mobile Robotics
301081.2	Sustainable Design 2: Product Service Systems

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1	Special Technical Project

Key Program - Robotics and Mechatronics

KT3141.1

This program provides the skills necessary for the design of smart machines of all types: cruise control in automobiles, pilotless spacecraft, automated factories and medical telerobotics. The course, accompanied by an extensive and integrated hands-on laboratory program, is essentially concerned with the design of intelligent mechanical systems and automation, and includes the study of robotics, computer control, automated manufacturing, microprocessor applications and machine design. Graduates in the program acquire the combined skills of mechanical and computer/electrical engineering that are needed in leading-edge industries such as aerospace systems, the car industry, automation and robotic

applications, biomedical engineering, laser systems, and building materials manufacture.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students choose their key program at the end of first year. Robotics and Mechatronics engineering students will then undertake the following units.

Full-time - Autumn Intake

Year 2

Autumn session

300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300005.2	Circuit Theory
300018.2	Digital Systems 1

Spring session

300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300052.2	Power and Machines
300044.2	Microcontrollers and PLCs

Year 3

Autumn session

300764.1	Mechanical Design
300763.1	Advanced Dynamics
300025.3	Electronics
300666.2	Advanced Engineering Topic 1

Spring session

300043.4	Mobile Robotics
300971.1	Engineering Project 1
300667.2	Advanced Engineering Topic 2

And one elective unit

* Elective units must be level 2 or higher

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 4

Autumn session

300972.1	Engineering Project 2
300056.4	Robotics
300969.1	Advanced Engineering Thesis 1: Preliminary Investigations

And one Alternate unit

Spring session

300075.4	Instrumentation and Measurement
300487.3	Mechatronic Design

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 104

300970.1   Advanced Engineering Thesis 2: Detailed Investigations

And one Alternate unit

Alternate Units

300999.1   Computational Fluid Dynamics
301000.1   Computer Aided Engineering
300029.3   Engineering Visualization
300762.2   Fluid Mechanics
301076.1   Graphics 2: Visual Simulation
301079.1   Graphics 3: 3D Engineering Specifications and Visualisation
300759.1   Thermal and Fluid Engineering
300760.1   Thermodynamics and Heat Transfer

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1   Special Technical Project

Key Program - Mechanical

KT3142.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Examples include mechanical and machinery design; manufacturing; energy production; and marketing and management activities. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students choose their key program at the end of first year. Mechanical engineering students will then undertake the following units.

Full-time - Autumn Intake

Year 2

Autumn session

300035.3   Kinematics and Kinetics of Machines
300040.2   Mechanics of Materials
300762.2   Fluid Mechanics

301079.1   Graphics 3: 3D Engineering Specifications and Visualisation

Spring session

300480.2   Dynamics of Mechanical Systems
300735.2   Automated Manufacturing
300760.1   Thermodynamics and Heat Transfer
300761.1   Advanced Mechanics of Materials

Industrial Experience

300741.2   Industrial Experience (Engineering)

Year 3

Autumn session

300764.1   Mechanical Design
300763.1   Advanced Dynamics
300967.1   Engineering Science Project 1

And one elective unit

*Elective units must be level 2 or higher

Spring session

300759.1   Thermal and Fluid Engineering
300488.4   Numerical Methods in Engineering
300968.1   Engineering Science Project 2

And one elective unit

*Elective units must be level 2 or higher

Optional Elective

The following unit is an optional elective unit offered to students who are engaged in a School approved project. This unit can be taken during the third year of this course, however, permission is required to enrol in the unit.

301089.1   Special Technical Project

Key Program - Civil

KT3143.1

Civil engineering covers the fields of structural design, geotechnical engineering and water engineering, together with infrastructure design and environmental engineering. Graduates will work in the fields of design, construction and management of engineering structures. Projects may cover residential and commercial buildings, highways and airports, water supply and sewerage schemes, etc. You may be an engineer in private industry, government departments, or in city, municipal or shire councils.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 1

Autumn session

200237.4	Mathematics for Engineers 1
300963.1	Engineering Physics

BBus Core Unit 1

BBus Core Unit 2

Spring session

200238.2	Mathematics for Engineers 2
300965.1	Engineering Materials

BBus Core Unit 3

BBus Core Unit 4

Year 2

Autumn session

300027.2	Engineering Computing

BBus Professional Unit 1

BBus Professional Unit 2

BBus Major Unit 1

Spring session

300021.2	Electrical Fundamentals
300463.2	Fundamentals of Mechanics

BBus Major Unit 2

Bbus Major Unit 3

Year 3

Autumn session

300738.3	Surveying for Engineers
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
300985.1	Soil Mechanics

Spring session

300984.1	Pavement Materials and Design
300733.2	Introduction to Structural Engineering
300737.3	Environmental Engineering
300765.2	Hydraulics

Year 4

Autumn session

300732.2	Structural Analysis
300736.2	Concrete Structures (UG)
300983.1	Surface Water Hydrology

BBus Major Unit 4

Spring session

300730.2	Steel Structures

301001.1	Engineering Geomechanics

BBus Major Unit 5

BBus Major Unit 6

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 5

Autumn session

300973.1	Engineering Thesis 1: Preliminary Investigations

BBus Professional Unit 3

BBus Major Unit 7

BBus Major Unit 8

Spring session

300982.1	Transportation Engineering
300974.1	Engineering Thesis 2: Detailed Investigations
300488.4	Numerical Methods in Engineering

BBus Professional Unit 4

Key Program - Construction

KT3144.1

The Construction Key Program consists of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, and project management. Career opportunities include those in the private or public sector on projects covering highways, airports, and residential & commercial buildings.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 1

Autumn session

200237.4	Mathematics for Engineers 1
300963.1	Engineering Physics

BBus Core Unit 1

BBus Core Unit 2

Spring session

200238.2	Mathematics for Engineers 2
300965.1	Engineering Materials

BBus Core Unit 3

BBus Core Unit 4

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 106

Year 2

Autumn session

300027.2	Engineering Computing

BBus Professional Unit 1
BBus Professional Unit 2
BBus Major Unit 1

Spring session

300021.2	Electrical Fundamentals
300463.2	Fundamentals of Mechanics

BBus Major Unit 2
Bbus Major Unit 3

Year 3

Autumn session

300738.3	Surveying for Engineers
300040.2	Mechanics of Materials
200486.3	Quantity Surveying 1
300985.1	Soil Mechanics

Spring session

300984.1	Pavement Materials and Design
300733.2	Introduction to Structural Engineering
200468.2	Estimating 1
300707.2	Building 2

Year 4

Autumn session

300732.2	Structural Analysis
300736.2	Concrete Structures (UG)
300728.2	Construction Planning

BBus Major Unit 4

Spring session

300730.2	Steel Structures
300727.2	Project Management

BBus Major Unit 5
BBus Major Unit 6

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 5

Autumn session

300798.1	Sustainability and Risk Engineering
300973.1	Engineering Thesis 1: Preliminary Investigations

BBus Professional Unit 3
BBus Major Unit 7

Spring session

301001.1	Engineering Geomechanics
300974.1	Engineering Thesis 2: Detailed Investigations

BBus Professional Unit 4
BBus Major Unit 8

Key Program - Electrical

KT3145.1

This program includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control systems in public utilities, telecommunications, manufacturing, and electrical systems.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Full-time - Autumn Intake

Year 1

Autumn session

200237.4	Mathematics for Engineers 1
300963.1	Engineering Physics

BBus Core Unit 1
BBus Core Unit 2

Spring session

200238.2	Mathematics for Engineers 2
300965.1	Engineering Materials

BBus Core Unit 3
BBus Core Unit 4

Year 2

Autumn session

300027.2	Engineering Computing

BBus Professional Unit 1
BBus Professional Unit 2
BBus Major Unit 1

Spring session

300021.2	Electrical Fundamentals
300463.2	Fundamentals of Mechanics

BBus Major Unit 2
Bbus Major Unit 3

Year 3

Autumn session

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 107

300005.2	Circuit Theory
300025.3	Electronics
300057.4	Signals and Systems
300018.2	Digital Systems 1

Spring session

300076.3	Microprocessor Systems
300481.2	Engineering Electromagnetics
300052.2	Power and Machines
300009.3	Control Systems

Year 4

Autumn session

300007.2	Communication Systems
300071.2	Electrical Machines 1

BBus Major Unit 4

BBus Major Unit 5

Spring session

300771.1	Power Systems
300069.3	Digital Signal Processing

BBus Major Unit 6

BBus Major Unit 7

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 5

Autumn session

300772.1	Power Electronics
300973.1	Engineering Thesis 1: Preliminary Investigations

BBus Professional Unit 3

BBus Major Unit 8

Spring session

300075.4	Instrumentation and Measurement
300974.1	Engineering Thesis 2: Detailed Investigations
300070.4	Electrical Drives

BBus Professional Unit 4

Key Program - Mechanical

KT3146.1

In addition to providing training in conventional mechanical engineering subjects, the course structure introduces students to units of study that address sustainability including sustainable design and sustainable energy engineering. Graduates will be well equipped with broad-based skills that meet the demand of Australian industries and are conscious of the need to promote sustainable design and practices. Examples include mechanical and machinery design; manufacturing; energy production; and marketing and management activities. Skills gained are required in industries such as manufacturing, materials handling, automobile, aerospace, mining, building services and infrastructure development.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Year 1

Autumn session

200237.4	Mathematics for Engineers 1
300963.1	Engineering Physics

BBus Core Unit 1

BBus Core Unit 2

Spring session

200238.2	Mathematics for Engineers 2
300965.1	Engineering Materials

BBus Core Unit 3

BBus Core Unit 4

Year 2

Autumn session

300027.2	Engineering Computing

BBus Professional Unit 1

BBus Professional Unit 2

BBus Major Unit 1

Spring session

300021.2	Electrical Fundamentals
300463.2	Fundamentals of Mechanics

BBus Major Unit 2

Bbus Major Unit 3

Year 3

Autumn session

300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300762.2	Fluid Mechanics
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation

Spring session

300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300760.1	Thermodynamics and Heat Transfer
300761.1	Advanced Mechanics of Materials

Year 4

Autumn session

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 108

300764.1	Mechanical Design
300763.1	Advanced Dynamics

BBus Major Unit 4
BBus Major Unit 5

Spring session

300759.1	Thermal and Fluid Engineering
300488.4	Numerical Methods in Engineering

BBus Major Unit 6
BBus Major Unit 7

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 5

Autumn session

300056.4	Robotics
300973.1	Engineering Thesis 1: Preliminary Investigations

BBus Professional Unit 3
BBus Major Unit 8

Spring session

301000.1	Computer Aided Engineering
300974.1	Engineering Thesis 2: Detailed Investigations
300487.3	Mechatronic Design

BBus Professional Unit 4

Key Program - Robotics and Mechatronics

KT3147.1

Specialisation Structure

Year 1

Autumn session

200237.4	Mathematics for Engineers 1
300963.1	Engineering Physics

BBus Core Unit 1
BBus Core Unit 2

Spring session

200238.2	Mathematics for Engineers 2
300965.1	Engineering Materials

BBus Core Unit 3
BBus Core Unit 4

Year 2

Autumn session

300027.2	Engineering Computing

BBus Professional Unit 1

BBus Professional Unit 2
BBus Major Unit 1

Spring session

300021.2	Electrical Fundamentals
300463.2	Fundamentals of Mechanics

BBus Major Unit 2
Bbus Major Unit 3

Year 3

Autumn session

300035.3	Kinematics and Kinetics of Machines
300040.2	Mechanics of Materials
300005.2	Circuit Theory
300018.2	Digital Systems 1

Spring session

300480.2	Dynamics of Mechanical Systems
300735.2	Automated Manufacturing
300052.2	Power and Machines
300044.2	Microcontrollers and PLCs

Year 4

Autumn session

300764.1	Mechanical Design
300763.1	Advanced Dynamics
300025.3	Electronics

BBus Major Unit 4

Spring session

300043.4	Mobile Robotics

BBus Major Unit 5
BBus Major Unit 6
BBus Major Unit 7

Industrial Experience

300741.2	Industrial Experience (Engineering)

Year 5

Autumn session

300056.4	Robotics
300973.1	Engineering Thesis 1: Preliminary Investigations

BBus Major Unit 8
BBus Professional Unit 3

Spring session

300075.4	Instrumentation and Measurement
300974.1	Engineering Thesis 2: Detailed Investigations
300487.3	Mechatronic Design

BBus Professional Unit 4

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 109

Key Program - Civil

KT7000.1

Location

Campus	Mode
Bankstown Campus	External
Bankstown Campus	Internal
Lithgow site	External
Lithgow site	Internal
Penrith Campus	External
Penrith Campus	Internal
The College - Nirimba Education Precinct	External
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Choose three of the following units

700120.2	Surveying for Engineers (WSTC AssocD)
700111.2	Fluid Mechanics (WSTC AssocD)
700116.2	Mechanics of Materials (WSTC AssocD)
700245.1	Soil Mechanics (WSTC AssocD)
700115.2	Introduction to Structural Engineering (WSTC AssocD)
700239.1	Pavement Materials and Design (WSTC AssocD)
700102.2	Mathematics for Engineers 2 (WSTC AssocD)

Key Program - Electrical

KT7001.1

Location

Campus	Mode
Bankstown Campus	External
Bankstown Campus	Internal
Lithgow site	External
Lithgow site	Internal
Penrith Campus	External
Penrith Campus	Internal
The College - Nirimba Education Precinct	External
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Choose three of the following units

700240.1	Digital Systems 1 (WSTC AssocD)
700241.1	Signals and Systems (WSTC AssocD)
700242.1	Electronics (WSTC AssocD)
700243.1	Circuit Theory (WSTC AssocD)

700102.2	Mathematics for Engineers 2 (WSTC AssocD)

Key Program - Mechanical

KT7002.1

Location

Campus	Mode
Bankstown Campus	External
Bankstown Campus	Internal
Lithgow site	External
Lithgow site	Internal
Penrith Campus	External
Penrith Campus	Internal
The College - Nirimba Education Precinct	External
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Choose three of the following units

700116.2	Mechanics of Materials (WSTC AssocD)
700111.2	Fluid Mechanics (WSTC AssocD)
700244.1	Kinematics and Kinetics of Machines (WSTC AssocD)
700102.2	Mathematics for Engineers 2 (WSTC AssocD)

Key Program - Robotics and Mechatronics

KT7003.1

Location

Campus	Mode
Bankstown Campus	External
Bankstown Campus	Internal
Lithgow site	External
Lithgow site	Internal
Penrith Campus	External
Penrith Campus	Internal
The College - Nirimba Education Precinct	External
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must complete three units as follows

Choose at least one of the following units

700244.1	Kinematics and Kinetics of Machines (WSTC AssocD)
700116.2	Mechanics of Materials (WSTC AssocD)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 110

and choose either one or two of the following units
depending on how many units have been completed from
the list above.

700240.1	Digital Systems 1 (WSTC AssocD)
700243.1	Circuit Theory (WSTC AssocD)
700242.1	Electronics (WSTC AssocD)
700102.2	Mathematics for Engineers 2 (WSTC AssocD)

Major - Information Technology

M3002.1

This major IS NOT available to students enrolled in the
Networks or Information Systems Key Programs within the
Bachelor of Computing course, and the Bachelor of
Information and Communications Technology course. All
other students may select this major.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows

300565.2	Computer Networking
300095.4	Computer Networks and Internets
300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design
300582.3	Technologies for Web Applications
300583.2	Web Systems Development

Choose one of

300575.2	Networked Systems Design
300166.2	Systems and Network Management

Choose one of

300569.2	Computer Security
300104.4	Database Design and Development
300570.3	Human-Computer Interaction

Major - Web Systems Development

M3003.1

This major IS NOT available to students enrolled in the
Bachelor of Computing, Bachelor of Computer Science or
the Bachelor of Information and Communications
Technology courses. All other students may select this
major.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete the following eight units

300104.4	Database Design and Development
300111.2	Developing Web Applications with XML
300570.3	Human-Computer Interaction
300572.2	Information Systems Deployment and Management
300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design
300582.3	Technologies for Web Applications
300583.2	Web Systems Development

Major - Mathematics

M3054.1

This major covers topics in the traditional areas of calculus
and algebra. Single and multivariable calculus are covered,
as well as topics in linear algebra, analysis and
mathematical modelling. This major is available to all
undergraduate students and may meet the NSW Institute of
Teachers accreditation requirements for teaching
Mathematics as a first subject in NSW state high schools.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 1

300672.2	Mathematics 1A
300673.2	Mathematics 1B
200025.2	Discrete Mathematics

Level 2

Choose two units from the level 2 units below

200030.4	Differential Equations
200028.3	Advanced Calculus
200027.2	Linear Algebra

Level 3

200193.2	Abstract Algebra
200022.3	Mathematical Modelling
200023.3	Analysis

Major - Entertainment Computing

M3068.1

This major will deal with a comprehensive focus on the
technical and theoretical knowledge of design,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 111

development and deployment of software applications in the field of Entertainment Computing.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows.

300580.2	Programming Fundamentals
300585.2	Systems Analysis and Design
300491.2	Games Technology
300578.3	Professional Development
300565.2	Computer Networking
300104.4	Database Design and Development
300093.4	Computer Graphics
300862.2	Video Games Development

Major - Networking

M3070.1

The Networking Major provides the students with in-depth knowledge for the analysis, design, and implementation of networked systems. It offers the students the opportunity to develop the technical skills needed for management and secure operation of a broad range of systems, including LANs, WANs, wireless networks, distributed systems, and large heterogeneous networks.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows

300565.2	Computer Networking
300138.3	LAN Workshop
300095.4	Computer Networks and Internets
300143.3	Network Security
300575.2	Networked Systems Design
300166.2	Systems and Network Management
300957.1	Parallel and Distributed Computing
300952.1	Wireless and Mobile Networks

Major - Systems Programming

M3071.1

This major is only available to 3506 Bachelor of Computer Science and 3634 Bachelor of Computer Science Advanced students. This major aims to develop graduates with sound skills in the discipline of programming. The

focus is on programming at the level of system calls to the underlying operating system and many of the units use the industry standard language for systems programming, namely C/C++, as the vehicle of instruction. There is a strong emphasis on the development of highly efficient and reliable code that can provide support services for higher level application oriented programs, as well as the development of programs suitable for systems administration and management. Practical work utilises the Unix environment. This major is appropriate where a career in systems programming or systems administration is planned, or where the student wishes to develop advanced systems programming skills.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows.

Students must complete the following six units

300103.3	Data Structures and Algorithms
300167.3	Systems Programming 1
300115.3	Distributed Systems and Programming
300960.3	Mobile Applications Development
300583.2	Web Systems Development
300698.4	Operating Systems Programming

Choose two units from the following

300130.3	Internet Programming
300093.4	Computer Graphics
300165.3	Systems Administration Programming
300368.2	Intelligent Systems
300799.1	Advanced Theoretical Computer Science
300958.2	Social Web Analytics

Major - Networked Systems

M3072.1

This major is only available to 3506 Bachelor of Computer Science and 3634 Bachelor of Computer Science Advanced students. This major aims to develop graduates with sound skills in the discipline of networked computer systems. Recent advances in computer and telecommunications networked systems, particularly those based on TCP/IP, have increased the importance of network technologies in the discipline of computer science. This major covers a wide range of topics including computer communication network concepts and protocols, multimedia systems, Internet standards and technologies, network security, wireless and mobile computing, and distributed systems. The candidates are also introduced to some of the relevant current key research issues of the field.

Location

Campus	Mode
Penrith Campus	Internal

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 112

Specialisation Structure

Students must complete 80 credit points as follows.

Students must complete the following seven units

300565.2	Computer Networking
300128.4	Information Security
300115.3	Distributed Systems and Programming
300952.1	Wireless and Mobile Networks
300095.4	Computer Networks and Internets
300575.2	Networked Systems Design
300143.3	Network Security

Choose one unit from the following

300166.2	Systems and Network Management
300165.3	Systems Administration Programming
300698.4	Operating Systems Programming
300958.2	Social Web Analytics

Major - Systems Security

M3073.1

This major is only available to 3506 Bachelor of Computer Science and 3634 Bachelor of Computer Science Advanced students. Systems Security major aims to develop graduates with sound skills in the discipline of information systems security. With increasing widespread use of computer systems, systems security has become an important issue and data protection is an essential part of today's information systems now. This major covers a broad foundational information security knowledge and security protocols from basic security algorithms to their applications in computer systems and networks. Students will learn fundamental security concepts as well as the practical implementation of the security application programs.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows.

Students must complete the following six units

300096.5	Computer Organisation
300167.3	Systems Programming 1
300404.2	Formal Software Engineering
300128.4	Information Security
300569.2	Computer Security
300143.3	Network Security

Choose two units from the following

300698.4	Operating Systems Programming
300095.4	Computer Networks and Internets
300799.1	Advanced Theoretical Computer Science
300958.2	Social Web Analytics
300130.3	Internet Programming
300165.3	Systems Administration Programming

Major - Mobile Computing

M3074.1

This major is only available to students enrolled in 3639 BICT, 3684 BICT Adv, 3506 B Computer Science, 3634 B Computer Science (Adv), 3687 B Information Systems or 3688 B Information Systems (Adv). This major covers theories and technologies used for the development of distributed applications for hand-held mobile devices. Students completing this major will understand the advanced principles related to mobile hardware devices, data storage and transmission, and communication networks. In addition they will identify, analyse, and formulate solutions to real-world problems in the mobile domain. In devising these solutions students will also consider principles associated with user interface design, professional and ethical issues, in particular those relating to security and privacy of user data and user behaviour related to mobile devices and its applications.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows

300976.1	Technologies for Mobile Applications
300960.3	Mobile Applications Development
300952.1	Wireless and Mobile Networks
300961.2	Social Computing
300143.3	Network Security
300104.4	Database Design and Development
300570.3	Human-Computer Interaction
300579.5	Professional Experience

Major - Visualisation and Graphics

M3091.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows.

Core Units

301074.1	Graphics 1: 2D and 3D Industrial Design Communication
301076.1	Graphics 2: Visual Simulation
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 113

300570.3	Human-Computer Interaction

Alternate Units

301091.1	Graphics 4: Kinetic Narratives
301092.1	Graphics 5: Creative Computing
300580.2	Programming Fundamentals

Choose one of

300976.1	Technologies for Mobile Applications
301088.1	Tangible Interaction Design

Major - Design Management and Entrepreneurship

M3092.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows.

Core Units

301095.1	Sustainable Design 1: Materials and Technology
301081.2	Sustainable Design 2: Product Service Systems
301082.1	Design Management 2: Operation and Supply Chain
300014.3	Design Management 3: Organisational Skills for Designers

Alternate Units

301093.1	Design Management 1: Process and Manufacturing
301094.1	Design Management 4: Strategy and Lean Start-Up
200863.1	Leadership and Entrepreneurship
200862.1	Creating Change and Innovation

Major - Design-led Innovation and Management

M3093.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows.

Core Units

300014.3	Design Management 3: Organisational Skills for Designers
301084.1	Design Studio 6: Ambience, Place and Behaviour

Alterate Units

200083.2	Marketing Principles
301088.1	Tangible Interaction Design
101184.3	Psychology: Human Behaviour
200094.4	International Marketing
200088.3	Brand and Product Management
301094.1	Design Management 4: Strategy and Lean Start-Up

Major - Health Informatics

M3097.1

Increasingly, healthcare information is being captured electronically and newer technology modes are being applied in many innovative ways to support efficient and effective clinical care. This major aims to promote understanding of Information and Communications Technology (ICT) concepts in healthcare including electronic healthcare records; healthcare data analysis; fundamentals of medicine concepts and disease classification; healthcare system interoperability and design. This specialisation will prepare students for the ICT challenges ahead in the healthcare domain, and equip students with the knowledge and skills for taking up employment opportunities with major public and private healthcare providers and technology suppliers.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 80 credit points as follows

300104.4	Database Design and Development
300585.2	Systems Analysis and Design
300955.1	Healthcare Data Environments
300566.2	Introduction to Health Informatics
300956.1	Healthcare Software and Systems
300950.2	Fundamentals of Medical Concepts and Terminology
300951.2	Clinical Classification and Coding
300570.3	Human-Computer Interaction

Major - Big Data

M3098.1

This Major covers theories and technologies of big data with applications to information systems. Students completing this Major will possess and apply the technical

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 114

skills for managing large volumes and varieties of data in the information systems context.

Location

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure

Students must complete eight units as follows:

300580.2	Programming Fundamentals
300573.2	Information Systems in Context
300104.4	Database Design and Development
200032.5	Statistics for Business
301033.1	Introduction to Data Science
301110.1	Applications of Big Data
300584.4	Emerging Trends in Information Systems
301109.1	Visual Analytics

Major - Accounting

MT2020.1

The Accounting major equips you with the expert skills to create a career as an accounting specialist. You will be prepared to succeed in a range of roles in accounting practices, and also in both public and private enterprises. In this major you will develop in-depth knowledge of accounting, supported by knowledge of law, economics, and finance. Accounting major units focus on the fundamentals of financial and management accounting, as well as accounting information and corporate systems. If you are seeking professional accreditation, you will also undertake specialised units in taxation and audit and assurance. The core units in the Bachelor of Business will provide you a foundation of business knowledge and develop your skills in innovation, career planning, and numeracy. The Accounting major builds on this knowledge and skills in an applied discipline based context. Accountants are in high global demand by enterprises in corporate, public, and not-for-profit sectors. The Bachelor of Business (Accounting) is accredited with CPA Australia, Chartered Accounting Australia and New Zealand (CAANZ) and the Institute of Public Accountants (IPA).

Location

Campus	Mode
Bankstown Campus	Internal
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must successfully complete 80 credit points including all of the core Units listed below.

Units in the Accounting Major

200101.4	Accounting Information for Managers
200111.2	Financial Accounting Applications
200116.4	Management Accounting Fundamentals
200536.3	Intermediate Financial Accounting
200534.3	Accounting Information Systems
200109.4	Corporate Accounting Systems
200267.2	Advanced Accounting
200535.2	Auditing and Assurance Services

Accreditation units

Students seeking accreditation with the Australian professional accounting bodies must complete the following four units as part of their elective pool:

200183.4	Law of Business Organisations
200187.3	Taxation Law
200488.4	Corporate Financial Management
200108.2	Contemporary Management Accounting

Note: Students must also complete the Bachelor of Business core units, the Accounting Major as well as a numeracy unit (either 200032 Statistics for Business or 200052 Introduction to Economic Methods) and the Enterprise Engaged Unit 200118 The Accountant as a Consultant to be eligible to apply for professional recognition.

Professional units for Careers in Money

Students planning to progress to the major in Accounting are advised to take the following four units to satisfy the requirements for their professional core:

200914.1	Working in Professions
200917.1	Innovation, Enterprise and Society
200118.3	The Accountant as a Consultant

Choose one of

200032.5	Statistics for Business
200052.5	Introduction to Economic Methods

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Accounting requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200910.1	Financing Enterprises
200909.1	Enterprise Law
200101.4	Accounting Information for Managers

Choose one of

200032.5	Statistics for Business
200052.5	Introduction to Economic Methods

Spring session

200912.1	Enterprise Leadership
200111.2	Financial Accounting Applications
200911.1	Enterprise Innovation and Markets

And one elective

This may include the Accreditation elective unit below

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 115

| 200488.4 | Corporate Financial Management |

Year 2

Autumn session

200116.4	Management Accounting Fundamentals
200536.3	Intermediate Financial Accounting
200914.1	Working in Professions
200534.3	Accounting Information Systems

Spring session

| 200109.4 | Corporate Accounting Systems |
| 200917.1 | Innovation, Enterprise and Society |

And two electives

These may include the Accreditation elective units below

| 200108.2 | Contemporary Management Accounting |
| 200183.4 | Law of Business Organisations |

Year 3

Autumn session

| 200535.2 | Auditing and Assurance Services |
| 200267.2 | Advanced Accounting |

And two electives

These may include the Accreditation elective unit below

| 200187.3 | Taxation Law |

Spring session

Enterprise Engaged Unit:

| 200118.3 | The Accountant as a Consultant |

And three electives

Part-time

To be advised

Summer Pathway

To be advised

Major - Applied Finance

MT2021.1

The Applied Finance major equips you with the expert skills to create a career as a finance specialist. In this major you will develop in-depth knowledge of finance with a focus on investment and securities, economics, and banking and finance. The core units in the Bachelor of Business will provide you a foundation of business knowledge and develop your skills in innovation, career planning, and numeracy. The Applied Finance major builds on this knowledge and skills in an applied discipline based context. Finance specialists work in a range of roles within the rapidly growing finance sector. This major fulfils the educational requirements for admission as an Associate (A Fin) of the Financial Services Institute of Australasia

(FINSIA) provided the applicant is at least working in the financial services industry. All other students are eligible to apply for Affiliate membership (no postnominals apply).

Location

| Campus | Mode |
| Parramatta Campus | Internal |

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200048.2	Financial Institutions and Markets
200488.4	Corporate Financial Management
200819.1	Investment Management
200916.1	Economic and Financial Modelling
200055.5	International Finance
200818.1	Bank Management
200079.3	Derivatives
200921.1	Security Analysis and Business Valuation

Professional Units for Careers in Money

Students undertaking the Applied Finance major are advised to take the following four units to satisfy the requirements for their professional core:

200914.1	Working in Professions
200917.1	Innovation, Enterprise and Society
200537.4	Economics and Finance Engagement Project

Choose one of

| 200032.5 | Statistics for Business |
| 200052.5 | Introduction to Economic Methods |

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Applied Finance requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autum session

200909.1	Enterprise Law
200910.1	Financing Enterprises
200048.2	Financial Institutions and Markets

Choose one of

| 200032.5 | Statistics for Business |
| 200052.5 | Introduction to Economic Methods |

Spring session

200912.1	Enterprise Leadership
200488.4	Corporate Financial Management
200911.1	Enterprise Innovation and Markets

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 116

And one elective

Year 2

Autumn session

200819.1   Investment Management
200914.1   Working in Professions

And two electives

Spring session

200916.1   Economic and Financial Modelling
200055.5   International Finance

And two electives

Year 3

Autumn session

200818.1   Bank Management
200079.3   Derivatives
200917.1   Innovation, Enterprise and Society

And one elective

Spring session

200921.1   Security Analysis and Business Valuation

Enterprise Engaged Unit:

200537.4   Economics and Finance Engagement Project

And two electives

Part-time

Year 1

Autumn session

200909.1   Enterprise Law
200048.2   Financial Institutions and Markets

Spring session

200911.1   Enterprise Innovation and Markets
200910.1   Financing Enterprises

Year 2

Autumn session

200488.4   Corporate Financial Management

Choose one of

200052.5   Introduction to Economic Methods
200032.5   Statistics for Business

Spring session

200912.1   Enterprise Leadership

And one elective

Year 3

Autumn session

200819.1   Investment Management

And one elective

Spring session

200914.1   Working in Professions

And one elective

Year 4

Autumn session

200055.5   International Finance

And one elective

Spring session

200916.1   Economic and Financial Modelling

And one elective

Year 5

Autumn session

200818.1   Bank Management
200917.1   Innovation, Enterprise and Society

Spring session

200079.3   Derivatives

And one elective

Year 6

Autumn session

Enterprise Engaged Unit:

200537.4   Economics and Finance Engagement Project

And one elective

Spring session

200921.1   Security Analysis and Business Valuation

And one elective

Summer Pathway
To be advised

Major - Economics

MT2022.1

The Economics major provides a broad pluralist perspective on fundamental aspects of relationships between individuals, firms, institutions and countries. Students will learn how economies function and how public policy and the way organisations behave affect diverse social, economic and environmental problems. Students

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 117

are introduced to a wide array of competing economic
theories, so that they are critically informed about the ways
in which they can transform the world. A major in
Economics prepares students to be active participants in
addressing the wide range of problems faced by
governments, social organisations and the business
community in the domestic and international economies.
Students who study economics can expect to develop their
analytical and problem solving skills and to be intellectually
challenged, whether they view the discipline as providing
specific vocational skills or as an area of academic and
intellectual interest to them. An Economics major is very
highly regarded in the business world and opens up a very
large range of career prospects in general business,
finance and the public sector.

Location

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure

Qualification for the Economics Major requires the
successful completion of 80 credit points including all of the
core Units listed below.

Core Units for this Major

200922.1	Consumers, Firms and Markets
200924.1	Cost Benefit Analysis
200926.1	Macroeconomic Measures and Models
200925.1	Growth, Cycles and Crises
200923.1	Corporations, Economic Power and Policy
200916.1	Economic and Financial Modelling
200815.2	Globalisation and Sustainability
200549.2	The Australian Macroeconomy

Professional Units for Careers in Money

Students undertaking the Economics major are advised to
take the following four units to satisfy the requirements for
their professional core:

200914.1	Working in Professions
200917.1	Innovation, Enterprise and Society
200537.4	Economics and Finance Engagement Project

Choose one of

200032.5	Statistics for Business
200052.5	Introduction to Economic Methods

Recommended Sequence

Qualification for the award of Bachelor of Business with a
major in Economics requires the successful completion of
240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200909.1	Enterprise Law
200910.1	Financing Enterprises
200922.1	Consumers, Firms and Markets

Choose one of

200032.5	Statistics for Business
200052.5	Introduction to Economic Methods

Spring session

200549.2	The Australian Macroeconomy
200912.1	Enterprise Leadership
200911.1	Enterprise Innovation and Markets

And one elective

Year 2

Autumn session

200924.1	Cost Benefit Analysis
200914.1	Working in Professions

And two electives

Spring session

200916.1	Economic and Financial Modelling
200926.1	Macroeconomic Measures and Models

And two electives

Year 3

Autumn session

200815.2	Globalisation and Sustainability
200923.1	Corporations, Economic Power and Policy
200917.1	Innovation, Enterprise and Society

And one elective

Spring session

200925.1	Growth, Cycles and Crises

Enterprise Engaged Unit:

200537.4	Economics and Finance Engagement Project

And two electives

Part-time

Year 1

Autumn session

200909.1	Enterprise Law
200911.1	Enterprise Innovation and Markets

Spring session

200910.1	Financing Enterprises
200922.1	Consumers, Firms and Markets

Year 2

Autumn session

200549.2	The Australian Macroeconomy

Choose one of

200032.5	Statistics for Business

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 118

200052.5   Introduction to Economic Methods

Spring session

200912.1   Enterprise Leadership

And one elective

Year 3

Autumn session

200924.1   Cost Benefit Analysis

And one elective

Spring session

200914.1   Working in Professions

And one elective

Year 4

Autumn session

200926.1   Macroeconomic Measures and Models

And one elective

Spring session

200916.1   Economic and Financial Modelling

And one elective

Year 5

Autumn session

200815.2   Globalisation and Sustainability
200917.1   Innovation, Enterprise and Society

Spring session

200530.3   Microeconomic Theory and Applications

And one elective

Year 6

Autumn session

Enterprise Engaged Unit:

200537.4   Economics and Finance Engagement Project

And one elective

Spring session

200925.1   Growth, Cycles and Crises

And one elective

Summer Pathway

To be advised

Major - Hospitality Management

MT2023.1

The Hospitality Management major is designed to prepare you for a career that goes beyond providing customer 'service' and focuses on providing customer 'experience'. This major equips you with the expert skills required to effectively and efficiently manage hotels, resorts, clubs, food-service enterprises or other service-oriented businesses. The Hospitality Management major units focus on hospitality operations management, planning and design of hospitality facilities, and business management, with opportunities to undertake industry-related projects. Hospitality Management leads to exciting and varied careers across a range of local and international sectors.

Location

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200273.5	Managing Service and Experience
200710.3	Managing the Food and Beverage Experience
200709.2	Managing the Accommodation Experience
200584.3	Hospitality Management Operations
200742.2	Sport and Hospitality Event Management
200708.2	Hospitality Industry
200707.3	Service Industry Studies
200148.2	Planning and Design of Hospitality Facilities

Professional Units for Careers in Markets

Students undertaking the Hospitality Management major are advised to take the following four units to satisfy the requirements for their professional core:

200915.1	The Service Enterprise
200032.5	Statistics for Business
200918.1	Design Thinking for Creativity
200561.3	Hospitality Management Applied Project

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Hospitality Management requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 119

200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership
200710.3	Managing the Food and Beverage Experience
200032.5	Statistics for Business

Spring session

200909.1	Enterprise Law
200910.1	Financing Enterprises
200709.2	Managing the Accommodation Experience

And one elective

Year 2

Autumn session

200915.1	The Service Enterprise
200707.3	Service Industry Studies

And two electives

Spring session

200742.2	Sport and Hospitality Event Management
200584.3	Hospitality Management Operations
200918.1	Design Thinking for Creativity

And one elective

Year 3

Autumn session

200273.5	Managing Service and Experience
200708.2	Hospitality Industry

And two electives

Spring session

200148.2	Planning and Design of Hospitality Facilities

Enterprise Engaged Unit:

200561.3	Hospitality Management Applied Project

And two electives

Part-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200909.1	Enterprise Law

Spring session

200910.1	Financing Enterprises
200032.5	Statistics for Business

Year 2

Autumn session

200710.3	Managing the Food and Beverage Experience
200709.2	Managing the Accommodation Experience

Spring session

200912.1	Enterprise Leadership

And one elective

Year 3

Autumn session

200915.1	The Service Enterprise

And one elective

Spring session

200742.2	Sport and Hospitality Event Management

And one elective

Year 4

Autumn session

200707.3	Service Industry Studies

And one elective

Spring session

200584.3	Hospitality Management Operations
200148.2	Planning and Design of Hospitality Facilities

Year 5

Autumn session

200708.2	Hospitality Industry

And one elective

Spring session

200918.1	Design Thinking for Creativity

And one elective

Year 6

Autumn session

200273.5	Managing Service and Experience

And one elective

Spring session

Enterprise Engaged Unit:

200561.3	Hospitality Management Applied Project

And one elective

Summer Pathway

To be advised

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 120

Major - Human Resource Management

MT2024.1

The Human Resource Management Major is designed for people who seek careers in human resource management and industrial relations. Graduates' careers focus on enhancing the value of human and social capital through supporting employee engagement for many different kinds of organisations, market-oriented and community-oriented organisations and many kinds of people. The teaching philosophy is based on knowledge in action, a fusion of the Australia Human Resource Institute's capabilities for HR professionals and the Western Sydney University Graduate Attributes designed to secure success. An aim of the program is to instil those values and attitudes that can support leaders in judgements about balancing the pursuit of organisational objectives with creating opportunities for developing people's capacities and careers. The perspectives are local and international, with an emphasis on the value of cultural and demographic diversity. Graduates have knowledge of how leadership and management of people can support organisational objectives and create organisational opportunities. This capacity comes from grounding in human resource management and industrial relations practice using contemporary law and research in applied projects. Students combine this with an education in the pressures organisations experience in inter-disciplinary subjects focused on money, markets and management. That is, graduates develop commercial acumen and appreciate the competing interests around work, aware of trends locally and internationally. Throughout the program, students are challenged to develop and demonstrate communication, cultural, and analytic skills required to be innovative and responsible team-members and leaders.

Location

Campus	Mode
Bankstown Campus	Internal
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core Units listed below.

Core Units for this Major

200300.2	Managing People at Work
200614.2	Enterprise Industrial Relations
200859.1	Human Resource Development
200621.3	International Human Resource Management
200739.2	Reward and Performance Management
200613.2	Negotiation, Bargaining and Advocacy
200860.1	People, Work and Society
200740.3	Human Resource and Industrial Relations Strategy

Professional Units for Careers in Management

Students undertaking the Human Resource Management major are advised to take the following four units to satisfy the requirements for their professional core:

200376.3	Managing and Developing Careers
301123.1	Management Analytics
200919.1	Innovation and Professional Practice
200575.3	Processes and Evaluation in Employment Relations

Note: Students enrolled in MT2024 Human Resource Management are advised that the enterprise engaged unit 200575 Processes and Evaluation in Employment Relations is required for accreditation purposes.

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Human Resource Management requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership
200909.1	Enterprise Law
200300.2	Managing People at Work

Spring session

200911.1	Enterprise Innovation and Markets
200859.1	Human Resource Development
301123.1	Management Analytics

And one elective

Year 2

Autumn session

200614.2	Enterprise Industrial Relations
200621.3	International Human Resource Management

And two electives

Spring session

200739.2	Reward and Performance Management
200376.3	Managing and Developing Careers

And two electives

Year 3

Autumn session

200860.1	People, Work and Society
200613.2	Negotiation, Bargaining and Advocacy
200919.1	Innovation and Professional Practice

And one elective

Spring session

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 121

200740.3 Human Resource and Industrial Relations Strategy

Enterprise Engaged Unit:

200575.3 Processes and Evaluation in Employment Relations

And two electives

Part-time

Year 1

Autumn session

200910.1 Financing Enterprises
200912.1 Enterprise Leadership

Spring session

301123.1 Management Analytics
200911.1 Enterprise Innovation and Markets

Year 2

Autumn session

200909.1 Enterprise Law
200300.2 Managing People at Work

Spring session

200859.1 Human Resource Development

And one elective

Year 3

Autumn session

200614.2 Enterprise Industrial Relations

And one elective

Spring session

200376.3 Managing and Developing Careers

And one elective

Year 4

Autumn session

200621.3 International Human Resource Management

And one elective

Spring session

200739.2 Reward and Performance Management

And one elective

Year 5

Autumn session

200860.1 People, Work and Society

And one elective

Spring session

200919.1 Innovation and Professional Practice

And one elective

Year 6

Autumn session

200613.2 Negotiation, Bargaining and Advocacy

And one elective

Spring session

200740.3 Human Resource and Industrial Relations Strategy

Enterprise Engaged Unit:

200575.3 Processes and Evaluation in Employment Relations

Summer Pathway
To be advised

Major - International Business

MT2025.1

The global economy is becoming increasingly important for organisations seeking out new opportunities to expand their customer base and develop partnerships. Managers who are well versed in the needs of doing business internationally and who can exploit these opportunities will therefore play an integral role in any such corporation. Building on a solid foundation in domestic business education, including global sustainability, international business strategy, managing in a global environment, and international marketing, this major equips graduates with the detailed knowledge of the international dimension of business and the necessary understanding of the workings of that market system.

Location

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure
Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200591.2 Introduction to International Business
200864.1 Managing in the Global Environment
200815.2 Globalisation and Sustainability
200589.2 Export Strategy and Applications
200098.3 The Markets of Asia
200094.4 International Marketing
200863.1 Leadership and Entrepreneurship

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 122

200626.2   International Business Strategy

Professional Units for Careers in Markets

Students undertaking the International Business major are advised to take the following four units to satisfy the requirements for their professional core:

200915.1   The Service Enterprise
200032.5   Statistics for Business
200918.1   Design Thinking for Creativity
200590.2   International Business Project

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in International Business requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200911.1   Enterprise Innovation and Markets
200912.1   Enterprise Leadership
200591.2   Introduction to International Business
200032.5   Statistics for Business

Spring session

200909.1   Enterprise Law
200910.1   Financing Enterprises
200864.1   Managing in the Global Environment

And one elective

Year 2

Autumn session

200915.1   The Service Enterprise
200815.2   Globalisation and Sustainability

And two electives

Spring session

200589.2   Export Strategy and Applications
200098.3   The Markets of Asia

And two electives

Year 3

Autumn session

200094.4   International Marketing
200918.1   Design Thinking for Creativity
200863.1   Leadership and Entrepreneurship

And one elective

Spring session

200626.2   International Business Strategy

Enterprise Engaged Unit:

200590.2   International Business Project

And two electives

Part-time

Year 1

Autumn session

200911.1   Enterprise Innovation and Markets
200909.1   Enterprise Law

Spring session

200910.1   Financing Enterprises
200912.1   Enterprise Leadership

Year 2

Autumn session

200591.2   Introduction to International Business
200032.5   Statistics for Business

Spring session

200864.1   Managing in the Global Environment

And one elective

Year 3

Autumn session

200815.2   Globalisation and Sustainability

And one elective

Spring session

200915.1   The Service Enterprise

And one elective

Year 4

Autumn session

200589.2   Export Strategy and Applications

And one elective

Spring session

200098.3   The Markets of Asia

And one elective

Year 5

Autumn session

200094.4   International Marketing
200863.1   Leadership and Entrepreneurship

Spring session

200918.1   Design Thinking for Creativity

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 123

Year 6

Autumn session

200626.2   International Business Strategy

And one elective

Spring session

Enterprise Engaged Unit:

200590.2   International Business Project

And one elective

Summer Pathway

To be advised

Major - Management

MT2026.1

The Management major equips you with the expert skills to create a career as a management specialist. You will be prepared to succeed in a range of roles in contemporary private, public, and not-for-profit organisations in Australia and abroad. In this major you will develop strategic management knowledge to enable effective organisational decision making. The units in this major focus on organisational learning and development and behaviour, operations management, leadership and entrepreneurship, change and innovation, and policy. You can look forward to a range of careers in the broad and complex field of management.

Location

Campus	Mode
Bankstown Campus	Internal
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200585.4	Organisational Behaviour
200158.4	Business, Society and Policy
200864.1	Managing in the Global Environment
200865.1	Managing Operations
200862.1	Creating Change and Innovation
200863.1	Leadership and Entrepreneurship
200587.2	Strategic Management
200157.3	Organisational Learning and Development

Professional Units for Careers in Management

Students undertaking the Management major are advised to take the following four units to satisfy the requirements for their professional core:

200376.3	Managing and Developing Careers
301123.1	Management Analytics
200919.1	Innovation and Professional Practice
200568.3	Contemporary Management Issues

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Management requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership
200911.1	Enterprise Innovation and Markets
200585.4	Organisational Behaviour

Spring session

200909.1	Enterprise Law
301123.1	Management Analytics
200864.1	Managing in the Global Environment

And one elective

Year 2

Autumn session

200158.4	Business, Society and Policy
200862.1	Creating Change and Innovation

And two electives

Spring session

200865.1	Managing Operations
200157.3	Organisational Learning and Development
200376.3	Managing and Developing Careers

And one elective

Year 3

Autumn session

200863.1	Leadership and Entrepreneurship
200919.1	Innovation and Professional Practice

And two electives

Spring session

200587.2   Strategic Management

Enterprise Engaged Unit:

200568.3   Contemporary Management Issues

And two electives

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 124

Part-time

Year 1

Autumn session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership

Spring session

200909.1	Enterprise Law
301123.1	Management Analytics

Year 2

Autumn session

200911.1	Enterprise Innovation and Markets
200585.4	Organisational Behaviour

Spring session

200864.1	Managing in the Global Environment

And one elective

Year 3

Autumn session

200158.4	Business, Society and Policy

And one elective

Spring session

200865.1	Managing Operations

And one elective

Year 4

Autumn session

200862.1	Creating Change and Innovation

And one elective

Spring session

200376.3	Managing and Developing Careers

And one elective

Year 5

Autumn session

200863.1	Leadership and Entrepreneurship

And one elective

Spring session

200157.3	Organisational Learning and Development

And one elective

Year 6

Autumn session

200919.1	Innovation and Professional Practice

And one elective

Spring session

200587.2	Strategic Management

Enterprise Engaged Unit:

200568.3	Contemporary Management Issues

Summer Pathway
To be advised

Major - Marketing

MT2027.1

Marketing focuses on the exchange process built around understanding and satisfying the needs and wants of customers. Often this is associated as doing business within a highly competitive business environment, yet marketing strategy is also important for government and not-for-profit organisations. This major introduces students to the core concepts of marketing theory, consumer behaviour, marketing communications, brand management, and marketing strategy. Graduates are equipped with the skills for marketing careers in a range of diverse industries across an international platform. This major satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute.

Location

Campus	Mode
Bankstown Campus	Internal
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure
Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200083.2	Marketing Principles
200084.2	Consumer Behaviour
200086.3	Marketing Communications
200088.3	Brand and Product Management
200592.2	Marketing Research
200091.3	Business to Business Marketing
200094.4	International Marketing
200087.3	Strategic Marketing Management

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 125

Professional Units for Careers in Markets

Students undertaking the Marketing major are advised to take the following four units to satisfy the requirements for their professional core:

200915.1	The Service Enterprise
200032.5	Statistics for Business
200918.1	Design Thinking for Creativity
200096.3	Marketing Planning Project

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Marketing requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership
200083.2	Marketing Principles
200032.5	Statistics for Business

Spring session

200910.1	Financing Enterprises
200909.1	Enterprise Law
200084.2	Consumer Behaviour

And one elective

Year 2

Autumn session

200915.1	The Service Enterprise
200086.3	Marketing Communications

And two electives

Spring session

200088.3	Brand and Product Management
200592.2	Marketing Research

And two electives

Year 3

Autumn session

200091.3	Business to Business Marketing
200918.1	Design Thinking for Creativity
200094.4	International Marketing

And one elective

Spring session

200087.3	Strategic Marketing Management

Enterprise Engaged Unit:

200096.3	Marketing Planning Project

And two electives

Part-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200909.1	Enterprise Law

Spring session

200083.2	Marketing Principles
200032.5	Statistics for Business

Year 2

Autumn session

200912.1	Enterprise Leadership
200084.2	Consumer Behaviour

Spring session

200910.1	Financing Enterprises

And one elective

Year 3

Autumn session

200915.1	The Service Enterprise

And one elective

Spring session

200086.3	Marketing Communications

And one elective

Year 4

Autumn session

200592.2	Marketing Research

And one elective

Spring session

200088.3	Brand and Product Management

And one elective

Year 5

Autumn session

200091.3	Business to Business Marketing

And one elective

Spring session

200918.1	Design Thinking for Creativity

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 126

Year 6

Autumn session

200094.4	International Marketing
200087.3	Strategic Marketing Management

Spring session

Enterprise Engaged Unit:

200096.3	Marketing Planning Project

And one elective

Summer Pathway

To be advised

Major - Sport Management

MT2029.1

The Sport Management major is designed for people who seek careers in Australian and international Sport management. Specialist units provide students with a capacity to understand and function within the increasingly dedicated context in which sport is played, organised and managed. Students who complete this major will be equipped with the skills and knowledge to manage sport experiences pertaining to globalisation and emerging contemporary issues in sport. Graduates find career employment at all levels of government as well as within the private sector for both commercial and non-commercial organisations. Positions include project management of facilities and events, management and coordination of leisure, sport and civic event departments, sport marketing, player management and sport public relations, elite sport development, sport and leisure programming.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200705.2	The World of Sport Management
200665.2	Strategic Communication in Sport
200707.3	Service Industry Studies
200742.2	Sport and Hospitality Event Management
200664.2	Sport Management Internship
200754.2	Sports Management - Planning and Development
200273.5	Managing Service and Experience
400335.3	Contemporary Issues in Sport Management

Professional Units for Careers in Markets

Students undertaking the Sport Management major are advised to take the following four units to satisfy the requirements for their professional core:

200915.1	The Service Enterprise
200032.5	Statistics for Business
200918.1	Design Thinking for Creativity
200751.2	Sport Management Applied Project

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Sport Management requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership
200705.2	The World of Sport Management
200032.5	Statistics for Business

Spring session

200910.1	Financing Enterprises
200909.1	Enterprise Law
200665.2	Strategic Communication in Sport

And one elective

Year 2

Autumn session

200915.1	The Service Enterprise
200707.3	Service Industry Studies

And two electives

Spring session

200742.2	Sport and Hospitality Event Management
200664.2	Sport Management Internship
200918.1	Design Thinking for Creativity

And one elective

Year 3

Autumn session

200754.2	Sports Management - Planning and Development
200273.5	Managing Service and Experience

And two electives

Spring session

400335.3	Contemporary Issues in Sport Management

Enterprise Engaged Unit:

200751.2	Sport Management Applied Project

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 127

And two electives

Part-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200909.1	Enterprise Law

Spring session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership

Year 2

Autumn session

200705.2	The World of Sport Management
200032.5	Statistics for Business

Spring session

200665.2	Strategic Communication in Sport

And one elective

Year 3

Autumn session

200915.1	The Service Enterprise

And one elective

Spring session

200742.2	Sport and Hospitality Event Management

And one elective

Year 4

Autumn session

200707.3	Service Industry Studies

And one elective

Spring session

200918.1	Design Thinking for Creativity

And one elective

Year 5

Autumn session

200754.2	Sports Management - Planning and Development

And one elective

Spring session

200664.2	Sport Management Internship

And one elective

Year 6

Autumn session

200273.5	Managing Service and Experience

And one elective

Spring session

400335.3	Contemporary Issues in Sport Management

Enterprise Engaged Unit:

200751.2	Sport Management Applied Project

Summer Pathway
To be advised

Sub-major - Geography and Urban Studies

SM1093.1

Students in this sub-major examine the geography of contemporary Australian cities and regions. Geography is the integrated study of people, places and environments. The cutting edge interests of today's Geographers include post-colonialism, the emergence of global information economies, indigenous issues, class and cultural disparities, population movement, sexuality and space, and the global diffusion of popular culture. Urban Studies is a newer discipline focused on social justice within the city, through its critical assessments of peoples' access to scarce urban resources, such as housing, transport, education and employment. The political, economic, and cultural forces that shape cities and urban policy are the key concerns of the Urban Studies curriculum. These applied interests in urban well-being and city structure are the intellectual basis for the Urban Planning profession. The Geography and Urban Studies sub-major is a compulsory component of the University's accredited Planning course.

Location

Campus	Mode
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure
Students must complete four of the following units

Year 1

Autumn Session

101589.2	Cities: Introduction to Urban Studies

Year 2

Autumn Session

101590.2	Cultural and Social Geographies

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 128

Spring Session

101591.2	The Economics of Cities and Regions
101646.2	Analysis of Spatial Data

Year 3

Autumn Session

101593.3	Planning the City: Development, Community and Systems
101645.2	Transport, Access and Equity

Spring Session

101694.2	Geographies of Migration
101905.2	Indigenous Cultures: A Global Perspective

Sub-major - Property Investment

SM2050.1

The Property Investment sub-major is available to all undergraduate students other than those completing the Property Key Program or Major. This sub-major assists students in the finance and related areas who want to expand their expertise in property investment.

Location

Campus	Mode
Parramatta Campus	Multi Modal
Parramatta Campus	Internal

Specialisation Structure

Students must complete four units as follows.

200874.1	Property Development Process
200875.1	Property Finance
200749.2	Property Investment
200873.1	Property Portfolio Management

Sub-major - Systems Administration

SM3001.1

This sub-major is available to students who commenced prior to 2013.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete the following four units

300103.3	Data Structures and Algorithms
300149.3	Operating Systems

300165.3	Systems Administration Programming
300167.3	Systems Programming 1

Sub-major - Web Application Development (for Computing Students)

SM3006.1

This sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete the following four units

300111.2	Developing Web Applications with XML
300574.2	Internet Structures and Web Servers
300582.3	Technologies for Web Applications
300583.2	Web Systems Development

Note: Unit 300574 Internet Structures and Web Servers will no longer be available from 2013 and students are advised to enrol in unit 300130 Internet Programming in its place.

Sub-major - Mathematics

SM3025.1

This sub-major is available to all students. This sub-major may meet the NSW Institute of Teachers accreditation requirements for teaching Mathematics as a second subject in NSW state high schools.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Student must complete 40 credit points as follows

300672.2	Mathematics 1A
300673.2	Mathematics 1B

Choose two of

200028.3	Advanced Calculus
200030.4	Differential Equations
200027.2	Linear Algebra

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 129

Sub-major - Construction Economics

SM3029.1

This sub-major is a requirement for membership of the Australian Institute of Quantity Surveyors and is a useful course of study for those interested in the area of cost control and project planning.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete the following four units

200503.2	Construction Information Systems
300726.2	Estimating 2
200487.3	Quantity Surveying 2
300748.2	Quality and Value Management

Sub-major - Entertainment Computing

SM3052.1

This sub-major will deal with a broad focus on the technical and theoretical knowledge of design and development of software applications in the field of Entertainment Computing.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete 40 credit points as follows

300580.2	Programming Fundamentals
300491.2	Games Technology
300862.2	Video Games Development
300093.4	Computer Graphics

Sub-major - Social Media Analytics

SM3053.1

Social media is the pulse of the world. Analysing the enormous amount of data generated by such sites as Facebook, Twitter and Linkedin can be used to inform business decisions and understand how and why society reacts to certain situations. This sub-major will introduce the statistical methods needed to analyse the data from these sites so that businesses are able to use the customer feedback received about their products to inform their business strategy and the impact social media has on society.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows:

300580.2	Programming Fundamentals
300961.2	Social Computing
300958.2	Social Web Analytics

Choose one of

300700.5	Statistical Decision Making
200032.5	Statistics for Business
200263.5	Biometry

Sub-major - IT Support

SM3054.1

The sub-major prepares students to work with, train and support other people in their use of technology. With its practical orientation, it provides a sound foundation in information technology and computing particularly through learning by direct hands-on experience in class, laboratories and in real-world work experience sites. It is for people who want to work with computers within the IT (Information Technology) industry. This sub-major is only available to students enrolled in the 3639 Bachelor of Information and Communications Technology or 3684 Bachelor of Information and Communications Technology (Advanced).

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete 40 credit points as follows

300150.3	PC Workshop
300138.3	LAN Workshop
300136.4	I.T. Support Practicum

And choose one of

200083.2	Marketing Principles
300167.3	Systems Programming 1

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 130

Sub-major - Networking

SM3055.1

The Networking sub-major provides the students with the basic knowledge for analysis, design, and implementation of networked systems. It offers the students the opportunity to develop the technical skills needed for management and secure operation of the most commonly used networks.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete 40 credit points as follows

300565.2	Computer Networking
300095.4	Computer Networks and Internets

And choose two of

300575.2	Networked Systems Design
300143.3	Network Security
300166.2	Systems and Network Management
300952.1	Wireless and Mobile Networks
300957.1	Parallel and Distributed Computing

Sub-major - Web Application Development (for Computing Students)

SM3056.1

This sub-major provides a specialisation in developing systems specifically for the world wide web. The sub-major will enable students to develop systems for their own business or seek employment with a business that requires or already has a web presence. The sub-major is only available to students enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Student must complete 40 credit points as follows

300582.3	Technologies for Web Applications
300583.2	Web Systems Development
300111.2	Developing Web Applications with XML
300130.3	Internet Programming

Sub-major - Mobile Computing

SM3057.1

This sub-major covers theories and technologies used for the development of distributed applications for hand-held mobile devices. Students completing this major will understand and apply the advanced principles related to mobile: hardware devices, user interface design, data storage and transmission, and communication networks. This submajor is only available to students enrolled in 3639 BICT, 3684 BICT (Adv), 3506 B Computer Science, 3634 B Computer Science (Adv), 3687 B Information Systems or 3688 B Information Systems (Adv).

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Student must complete 40 credit points as follows

300976.1	Technologies for Mobile Applications
300960.3	Mobile Applications Development
300952.1	Wireless and Mobile Networks
300570.3	Human-Computer Interaction

Sub-major - Mobile Application Development (for Non-Computing Students only)

SM3058.1

This sub-major covers theories and technologies used for the development of distributed applications for hand-held mobile devices. Students completing this major will understand and apply the advanced principles related to mobile: hardware devices, user interface design, data storage and transmission, and communication networks. This sub-major is only available for non-computing students. Students enrolled in 3639 BICT, 3684 BICT (Adv), 3506 B Computer Science, 3634 B Computer Science (Adv), 3687 B Information Systems or 3688 B Information Systems (Adv) are not permitted to take this sub-major.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 131

300976.1	Technologies for Mobile Applications
300580.2	Programming Fundamentals
300104.4	Database Design and Development
300570.3	Human-Computer Interaction

Sub-major - Systems Security

SM3077.1

This sub-major is only available to students enrolled in the Bachelor of Computing, Bachelor of Information Systems or Bachelor of Information and Communications Technology courses or Bachelor of Information systems

Location

Campus	Mode
Penrith Campus	Multi Modal

Specialisation Structure

Students must complete the following four units

300128.4	Information Security
300143.3	Network Security
300698.4	Operating Systems Programming
300167.3	Systems Programming 1

Sub-major - Web Application Development (for Non-Computing Students)

SM3078.1

This sub-major is available to all undergraduate students except those enrolled in the Bachelor of Computing or Bachelor of Information and Communications Technology courses.

Location

Campus	Mode
Penrith Campus	Multi Modal

Specialisation Structure

Student must complete 40 credit points as follows

300580.2	Programming Fundamentals
300582.3	Technologies for Web Applications
300583.2	Web Systems Development

Choose one of

300569.2	Computer Security
300104.4	Database Design and Development
300111.2	Developing Web Applications with XML
300570.3	Human-Computer Interaction

Sub-major - Astroinformatics

SM3080.1

This sub-major aims to produce graduates with excellent computing skills, a thorough grounding in astronomy, and experience in using computers to solve complex, challenging scientific problems. Modern astronomy is strongly driven by large datasets, which require advanced computing procedures to analyse. Students will learn about the science of stars, planets and galaxies; the use of computers in science; and how to formulate and solve challenging problems in modern science using high-level computer skills.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows

300580.2	Programming Fundamentals
300672.2	Mathematics 1A
300966.1	The Cosmos in Perspective: Information and Life
300916.2	Astroinformatics

Sub-major - Visualisation

SM3084.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows.

Core Units

301074.1	Graphics 1: 2D and 3D Industrial Design Communication
301076.1	Graphics 2: Visual Simulation
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation

Alternate Unit

| 301091.1 | Graphics 4: Kinetic Narratives |

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 132

Sub-major - Human-Computer Interaction

SM3085.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows.

Core Unit

300570.3	Human-Computer Interaction

Alternate Units

300580.2	Programming Fundamentals
300976.1	Technologies for Mobile Applications
301088.1	Tangible Interaction Design

Sub-major - Industrial Manufacturing

SM3086.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows.

Core Units

301076.1	Graphics 2: Visual Simulation
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation
301082.1	Design Management 2: Operation and Supply Chain

Alternate Unit

301093.1	Design Management 1: Process and Manufacturing

Sub-major - Design Management

SM3087.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows.

Core Units

301082.1	Design Management 2: Operation and Supply Chain
300014.3	Design Management 3: Organisational Skills for Designers

Alternate Units

301093.1	Design Management 1: Process and Manufacturing
301094.1	Design Management 4: Strategy and Lean Start-Up

Sub-major - Responsible Design and Sustainability

SM3088.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points as follows.

Core Units

301095.1	Sustainable Design 1: Materials and Technology
301081.2	Sustainable Design 2: Product Service Systems

Alternate Units

101184.3	Psychology: Human Behaviour
301094.1	Design Management 4: Strategy and Lean Start-Up

Sub-major - Statistics

SM3089.1

This sub-major covers topics in statistics from an introductory level to exploring complex statistical techniques that are used to analyse and interpret data generated in many disciplines. Students considering undertaking further postgraduate research studies in any discipline should consider taking this sub-major as part of their undergraduate degree. This sub-major is open to all undergraduate students.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 133

Specialisation Structure

The Statistics sub-major is available to all Western Sydney University undergraduate students except those enrolled in the 3679 Bachelor of Science (Mathematical Science) course.

Student must complete 40 credit points as follows

Choose three of

301032.1	Making Sense of Data
301033.1	Introduction to Data Science
301034.1	Predictive Modelling
301035.1	Environmental Informatics

Choose one of

200263.5	Biometry
200032.5	Statistics for Business
300700.5	Statistical Decision Making

Sub-major - Health Informatics

SM3090.1

This sub-major will deal with the application of approaches, tools and techniques and the development of programs appropriate for Health Information systems. This sub-major is available to all students except those enrolled in the 3711 Bachelor of Information and Communications Technology (Health Information Management) course.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Students must complete the following four units

300955.1	Healthcare Data Environments
300566.2	Introduction to Health Informatics
300956.1	Healthcare Software and Systems
300950.2	Fundamentals of Medical Concepts and Terminology

Sub-major - Structures

SM3065.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete 40 credit points from the units listed below:

300986.1	Applied Mechanics
300987.1	Composite Structures
300739.2	Timber Structures (UG)

300988.1	Highway Infrastructure
300990.1	Pile Foundations

Sub-major - Geotechnical

SM3066.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete the following four units

300990.1	Pile Foundations
300989.1	Hydrogeology
300994.1	Waste Management
300988.1	Highway Infrastructure

Sub-major - Water and Environment

SM3067.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete 40 credit points from the units listed below

300991.1	Statistical Hydrology
300989.1	Hydrogeology
300993.1	Water Resource Engineering
300992.1	Water and Wastewater Treatment
300994.1	Waste Management
300798.1	Sustainability and Risk Engineering

Sub-major - Construction Economics

SM3068.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete the following four units

200503.2	Construction Information Systems
300726.2	Estimating 2
200487.3	Quantity Surveying 2
300748.2	Quality and Value Management

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 134

Sub-major - Telecommunications

SM3069.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete 40 credit points from the units listed below

300065.4	Wireless Communications
300997.1	Data Communications
300489.2	Radio and Satellite Communication
300019.4	Digital Systems 2
300029.3	Engineering Visualization

Sub-major - Power Engineering

SM3070.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete the following four units

300995.1	Power Quality
300019.4	Digital Systems 2
300998.1	Sustainable Energy Systems
300996.1	Smart Grids and Distributed Generation

Sub-major - Automation

SM3072.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete the following four units

300999.1	Computational Fluid Dynamics
300044.2	Microcontrollers and PLCs
300043.4	Mobile Robotics
300570.3	Human-Computer Interaction

Sub-major - Thermal and Fluid Systems

SM3074.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete the following four units

300999.1	Computational Fluid Dynamics
300762.2	Fluid Mechanics
300760.1	Thermodynamics and Heat Transfer
300759.1	Thermal and Fluid Engineering

Sub-major - Biomedical Engineering

SM3091.1

The Biomedical Engineering sub-major includes elements from the bioelectronics, biomechanical and biomechatronic specialisations. This allows students to undertake multidisciplinary study within engineering, which combines knowledge from electronics, chemical, materials, mechanical and mechatronic engineering with the life sciences of medicine, biology and molecular biology. Graduates will be equipped with professional skills to work in biomedical industry as engineers, with a good understanding of multidisciplinary principles and practices.

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete the following four units

300361.3	Introduction to Human Biology
301121.1	Biomedical Signals and Data Analysis
301122.1	Biomedical Electronics
401140.1	Biomechanics

Sub-major - Computer Aided Design (Mechanical)

SM3092.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete the following four units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 135

300999.1	Computational Fluid Dynamics
301076.1	Graphics 2: Visual Simulation
301091.1	Graphics 4: Kinetic Narratives
301081.2	Sustainable Design 2: Product Service Systems

Sub-major - Computer Aided Design (Mechatronics)

SM3093.1

Location

Campus	Mode
Penrith Campus	Internal

Specialisation Structure

Student must complete the following four units

301000.1	Computer Aided Engineering
300029.3	Engineering Visualization
301076.1	Graphics 2: Visual Simulation
301079.1	Graphics 3: 3D Engineering Specifications and Visualisation

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 136

SCHOOL OF SCIENCE AND HEALTH

Bachelor of Health Science

4656.2

The course provides a broad introduction to the health sciences with opportunities to specialise in one or two of the following areas: health promotion, health services management, therapeutic recreation, public health. Students who choose to enrol into two specialisations will identify one area as their key program and the second as their major. The Key program is considered the primary specialisation. The double specialisation is designed to increase students' areas of expertise and employability. Public Health is the only fully online key program in 4656. Students who choose the Public Health key program and a major in one of the other 3 specialisations of 4656 will be required to attend on-campus classes for the second area of study. Students may be able to transfer from this course to another within the School of Science and Health or Western Sydney University, however this process is competitive and is subject to meeting admission criteria and transfer places may be limited.

Study Mode
Three years full-time or six years part-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The Bachelor of Health Science (Health Service Management) has Professional Accreditation with the Australasian College of Health Service Management (ACHSM). The Bachelor of Health Science (Therapeutic Recreation) has been granted accreditation from Diversional Therapy Australia (DTA).

Admission
For local students admission is through UAC - Assumed knowledge, Any 2 units of English.

For international students, admission is through direct application to the university with IELTS equal to 6.5 or above.

Special Requirements
For students enrolled in the Key Programs for Health Promotion, Therapeutic Recreation and Health Services Management - Prior to the second year of the program students must have 1) Student Undertaking Form and National Police Certificate 2) Working with Children Check Student Declaration 3) Senior first aid certificate which includes cardiopulmonary resuscitation, and 4) All documentation is to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy including completion of an adult vaccination card. Students enrolled in the Public Health Program only do not need special requirements.

Course Structure
Qualification for this Key Program requires the successful completion of 240 credit points including the units within one of the following Key Programs.

Recommended Sequence
Students must select and enrol in one of the following Key Programs before selecting individual units. Please note the Public Health Key Program is online only.

KT4000.1	Health Promotion
KT4001.1	Health Services Management
KT4002.1	Therapeutic Recreation
KT4004.1	Public Health

Majors

These majors are available to Health Promotion, Health Service Management and Therapeutic Recreation students only.

M4001.1   Health Promotion

The Health Promotion major is not available to students enrolled in the Health Promotion Key Program of the Bachelor of Health Science.

M4002.1   Health Services Management

The Health Services Management major is not available to students enrolled in the Health Services Management Key Program of the Bachelor of Health Science.

M4000.1   Therapeutic Recreation

The Therapeutic Recreation major is not available to students enrolled in the Therapeutic Recreation Key Program of the Bachelor of Health Science.

Majors
The sharing of some common units across the key programs detailed above offers students the opportunity to achieve the Bachelor of Health Science with a key program and a major. Please note that the key program will appear on the testamur whilst the major will appear on the transcript. Qualification for the key program and major programs requires the successful completion of 240 credit points including the units listed in the recommended sequences below.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 137

Bachelor of Health Science (Therapeutic Recreation) with Health Promotion major

or

Bachelor of Health Science (Health Promotion) with Therapeutic Recreation major

Recommended sequence

Start year entry

Year 1

Autumn session

400870.2	Population Health and Society
400871.2	Professional Health Competencies
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science

Spring session

400732.2	Communication in Health
400863.2	Foundations of Research and Evidence-Based Practice
101614.2	Psychology and Health
400285.2	Public Health

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health
400244.2	Introduction to Leisure and Recreation Theory

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.4	Workplace Learning 1 (Therapeutic Recreation)
401195.1	Health Politics, Policy and Planning
400286.3	Injury Prevention

Year 3

Autumn session

400789.3	Leisure Education Programming and Mental Health
400252.3	Workplace Learning 2 (Community Placement)
400275.2	Health Planning Project
400784.3	Health Promotion Practice 1

Spring session

400249.2	Ethical and Legal Issues in Health Care
400786.2	Professional Transition Project
400254.2	Therapeutic Recreation Professional Project
400785.2	Health Promotion Practice 2

Mid-year entry

Year 1

Spring session

400732.2	Communication in Health
400863.2	Foundations of Research and Evidence-Based Practice
101614.2	Psychology and Health
400285.2	Public Health

Year 2

Autumn session

400870.2	Population Health and Society
400871.2	Professional Health Competencies
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.4	Workplace Learning 1 (Therapeutic Recreation)
401195.1	Health Politics, Policy and Planning
400249.2	Ethical and Legal Issues in Health Care

Year 3

Autumn session

400867.2	Approaches to Health Promotion
400252.3	Workplace Learning 2 (Community Placement)
400784.3	Health Promotion Practice 1
400244.2	Introduction to Leisure and Recreation Theory

Spring session

400286.3	Injury Prevention
400786.2	Professional Transition Project
400254.2	Therapeutic Recreation Professional Project
400785.2	Health Promotion Practice 2

Year 4

Autumn session

400789.3	Leisure Education Programming and Mental Health
400864.3	Research Methods (Quantitative and Qualitative)
400275.2	Health Planning Project
400866.3	Culture, Diversity and Health

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 138

Bachelor of Health Science (Therapeutic Recreation) with Health Services Management major

or

Bachelor of Health Science (Health Services Management) with Therapeutic Recreation major

Recommended Sequence

Start year entry

Year 1

Autumn session

400870.2	Population Health and Society
400871.2	Professional Health Competencies
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science

Spring session

400732.2	Communication in Health
400863.2	Foundations of Research and Evidence-Based Practice
101614.2	Psychology and Health
400277.4	Health Services Management

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health
400244.2	Introduction to Leisure and Recreation Theory

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.4	Workplace Learning 1 (Therapeutic Recreation)
401195.1	Health Politics, Policy and Planning
400249.2	Ethical and Legal Issues in Health Care

Year 3

Autumn session

400789.3	Leisure Education Programming and Mental Health
400252.3	Workplace Learning 2 (Community Placement)
400275.2	Health Planning Project
400787.2	Health Services Management Practice

Spring session

400788.3	Health Services Workforce Management
400786.2	Professional Transition Project
400254.2	Therapeutic Recreation Professional Project

400279.4	Health Services Financial Management

Mid-year entry

Year 1

Spring session

400732.2	Communication in Health
400863.2	Foundations of Research and Evidence-Based Practice
101614.2	Psychology and Health
400277.4	Health Services Management

Year 2

Autumn session

400870.2	Population Health and Society
400871.2	Professional Health Competencies
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.4	Workplace Learning 1 (Therapeutic Recreation)
401195.1	Health Politics, Policy and Planning
400249.2	Ethical and Legal Issues in Health Care

Year 3

Autumn session

400867.2	Approaches to Health Promotion
400252.3	Workplace Learning 2 (Community Placement)
400787.2	Health Services Management Practice
400244.2	Introduction to Leisure and Recreation Theory

Spring session

400788.3	Health Services Workforce Management
400786.2	Professional Transition Project
400254.2	Therapeutic Recreation Professional Project
400279.4	Health Services Financial Management

Year 4

Autumn session

400789.3	Leisure Education Programming and Mental Health
400864.3	Research Methods (Quantitative and Qualitative)
400275.2	Health Planning Project
400866.3	Culture, Diversity and Health

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 139

Bachelor of Health Science (Health Promotion) with Health Services Management major

or

Bachelor of Health Science (Health Services Management) with Health Promotion major

Recommended Sequence

Start year entry

Year 1

Autumn session

400870.2	Population Health and Society
400871.2	Professional Health Competencies
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science

Spring session

400732.2	Communication in Health
400863.2	Foundations of Research and Evidence-Based Practice
101614.2	Psychology and Health
400277.4	Health Services Management

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

And one elective

Recommended elective

400244.2	Introduction to Leisure and Recreation Theory

Spring session

401195.1	Health Politics, Policy and Planning
400285.2	Public Health
400286.3	Injury Prevention
400249.2	Ethical and Legal Issues in Health Care

Year 3

Autumn session

400275.2	Health Planning Project
400784.3	Health Promotion Practice 1
400787.2	Health Services Management Practice

And one elective

Spring session

400788.3	Health Services Workforce Management
400786.2	Professional Transition Project
400785.2	Health Promotion Practice 2
400279.4	Health Services Financial Management

Mid-year entry

Year 1

Spring session

400732.2	Communication in Health
400863.2	Foundations of Research and Evidence-Based Practice
101614.2	Psychology and Health
400277.4	Health Services Management

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400871.2	Professional Health Competencies
400870.2	Population Health and Society
400783.2	Professional Pathways in Health Science

Spring session

401195.1	Health Politics, Policy and Planning
400285.2	Public Health
400286.3	Injury Prevention
400249.2	Ethical and Legal Issues in Health Care

Year 3

Autumn session

300361.3	Introduction to Human Biology
400784.3	Health Promotion Practice 1
400866.3	Culture, Diversity and Health
400787.2	Health Services Management Practice

Spring session

400788.3	Health Services Workforce Management
400786.2	Professional Transition Project
400785.2	Health Promotion Practice 2
400279.4	Health Services Financial Management

Year 4

Autumn session

400275.2	Health Planning Project
400864.3	Research Methods (Quantitative and Qualitative)

And two electives

Recommended one elective be

400244.2	Introduction to Leisure and Recreation Theory

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 140

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Health Science (Honours)

4657.2

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2012 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

High-achieving students in the Bachelor of Health Science can take Honours as an additional year for full-time students (or a longer equivalent for part-time students) at the end of Year 3. Honours is a key early step in the path to leadership in the profession and opens up the world of research. The honours thesis will identify new ways to address real problems and is written under the supervision of experienced academic researchers.

The honours program encourages independent learning, develops research skills and provides an opportunity for deeper investigation in the major field of study. An honours program is a recognised preparation and entry point for postgraduate research studies and the research training is valuable preparation for careers in research and development and analysis in the public and private sectors.

The honours program consists of supervised research on a topic in health science, culminating in the production of a thesis and presentation of a seminar. The coursework component covers research training, research ethics and advanced research methods. Research projects often involve clinical studies and involvement with external health organisations.

The honours program is available to meritorious students in the Bachelor of Health Science and related courses.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission
Admission is through direct application to the university. Students must have completed a Bachelor of Health Science from this university or an equivalent degree from another university, with a threshold Admission Average Mark (AAM) equal to or above the minimum of 65.

Entry is competitive and will depend of availability of places and supervisors.

International applicants must apply directly to Western Sydney University via the International Office.

International students must have an IELTS equal to 6.5 or above.

Applicants from other universities for an honour program in Sport and Exercise Science will, in addition to the above, be required to demonstrate competence in the use of the University's Sport & Exercise Science laboratory equipment deemed necessary to carry out their proposed research as per the applicant's research statement.

In line with the Honours in Bachelors Award Policy:

Admission to an end-on or embedded honours program is determined on the basis of all of the four following criteria being met:

- a) Achievement of a threshold Admission Average Mark (AAM) equal to or above the minimum of 65; and
- b) Statement of Intent or School equivalent; and
- c) Appointment of a principal supervisor by the Head of School; and
- d) Demonstrated satisfactory academic writing skills appropriate to the discipline.
- A School Academic Committee may, on recommendation of the School Honours Coordinator, rank applicants on the basis of AAMs if the Head of School indicates the number of applications exceeds the availability of supervised places

Course Structure
Qualification for this award requires the successful completion of 80 credit points including the units listed in the recommended sequence below.

Recommended Sequence

Start Year Intake

Full-time

Year 1

Autumn session

| 400872.2 | Honours Research Design and Methodology |
| 400898.2 | Honours Thesis in Health Science A |

Spring session

| 400899.2 | Honours Thesis in Health Science B |

Part-time

Year 1

Autumn session

| 400872.2 | Honours Research Design and Methodology |

Spring session

| 400898.2 | Honours Thesis in Health Science A |

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 141

Year 2

Autumn

| 400900.2 | Honours Thesis in Health Science C |

Spring

| 400901.2 | Honours Thesis in Health Science D |

Mid Year Intake

Year 1

Spring session

| 400898.2 | Honours Thesis in Health Science A |

Year 2

Autumn session

| 400872.2 | Honours Research Design and Methodology |
| 400900.2 | Honours Thesis in Health Science C |

Spring session

| 400901.2 | Honours Thesis in Health Science D |

Bachelor of Health Science (Health and Physical Education)

4747.1

The Health and Physical Education (HPE) program brings together a comprehensive foundation of health sciences, understanding of physical activity, and skills in interacting with people. The course explores challenging areas of personal development, including youth health issues, sexuality, drugs, psychology and risk-taking behaviours, as well as general health science, including human biology, health systems, health promotion and research. Facilities are state of the art, including a new gymnasium and a renovated dance and gym studio, and practical experience is a strong feature of the program. The program is a popular pathway to a Master of Teaching degree, and then on to a teaching career. Teaching opportunities can be extended beyond HPE by studying electives, such as science and mathematics, where students gain a second teaching area in a subject of their choice. Graduates also work as personal trainers, sports coaches, research assistants, and community-based recreation.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Accreditation
Graduates may be eligible to apply for accreditation with the NSW Institute of Teachers following the successful completion of a recognised teaching qualification.

Admission
Assumed knowledge: Any 2 units of English

Recommended Studies: Personal Development, Health and Physical Education, or Community and Family Studies

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to Western Sydney University should also use the information provided on the UAC website.

For international students, admission is through direct application to the University with IELTS equal to 6.5 or above.

International students applying to Western Sydney University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements
In order to enrol in Second Year Autumn units, all students must have: 1. National Police Check, 2. Working with Children Check. In order to enrol in Second Year Spring units, all students must have a First Aid Certificate and Child Protection Certificate.

Course Structure
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Note: At least 60 credit points must be at Level 3 or above.

Note: For placement in schools, students must complete a Child Protection Policies and Procedures module. This requirement is completed through tutorials and assessment in 400871 Professional Health Competencies.

Recommended sequence

Start year intake

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400880.2	Fundamentals of Exercise Science
400871.2	Professional Health Competencies

Spring session

400808.4	Outdoor Recreation
400891.2	Movement and Skill Development
101614.2	Psychology and Health

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 142

400732.2   Communication in Health

Year 2

Autumn session

400867.2   Approaches to Health Promotion
401055.1   Sport and Exercise Psychology
400866.3   Culture, Diversity and Health

And one elective

Spring session

400892.2   Physical Activity, Nutrition and Health
400798.3   PDHPE: Games for Diverse Groups
400863.2   Foundations of Research and Evidence-Based Practice
400962.2   Foundations of Wellbeing

Year 3

Autumn session

401169.2   Coaching Sport and Recreation Activities
400894.2   Contemporary Youth Health Issues
400886.3   Motor Control and Skill Acquisition

And one elective

Spring session

400896.1   Gymnastics and Dance
401056.2   Applied Exercise Science for Personal Trainers and Coaches

And two electives

Mid-year intake

Year 1

Spring session

400808.4   Outdoor Recreation
400863.2   Foundations of Research and Evidence-Based Practice
101614.2   Psychology and Health
400732.2   Communication in Health

Autumn session

400870.2   Population Health and Society
300361.3   Introduction to Human Biology
400880.2   Fundamentals of Exercise Science
400871.2   Professional Health Competencies

Year 2

Spring session

400892.2   Physical Activity, Nutrition and Health
400891.2   Movement and Skill Development
400798.3   PDHPE: Games for Diverse Groups
400962.2   Foundations of Wellbeing

Autumn session

400867.2   Approaches to Health Promotion
401055.1   Sport and Exercise Psychology

400866.3   Culture, Diversity and Health

And one elective

Year 3

Spring session

400896.1   Gymnastics and Dance
401056.2   Applied Exercise Science for Personal Trainers and Coaches

And two electives

Autumn session

401169.2   Coaching Sport and Recreation Activities
400894.2   Contemporary Youth Health Issues
400886.2   Motor Control and Skill Acquisition

And one elective

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Health Science (Health and Physical Education)-Pathway to Teaching (Secondary)

4742.1

The Bachelor of Health and Physical Education (HPE) Pathway to Teaching (Secondary) brings together a comprehensive foundation of health sciences, understanding of physical activity, and skills in interacting with people. The course explores challenging areas of personal development, including youth health issues, sexuality, drugs, psychology and risk-taking behaviours, as well as general health science, including human biology, health systems, health promotion and research. Enrolment in this program involves direct pathway to a Master of Teaching degree, and then on to a teaching career. Teaching opportunities can be extended beyond HPE by studying electives, such as science and mathematics, where students gain a second teaching area in a subject of their choice. The degree also gives the advantage of early access to Education Studies units through mandatory completion of an Education Studies sub-major. These units of study are structured to gain the necessary learning areas to satisfy the Board of Studies, Teaching and Educational Standards discipline knowledge requirements for entry into teaching.

Study Mode
Three years full-time.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 143

Location

Campus	Attendance	Mode
Penrith Campus	Full Time	Internal

Accreditation

Graduates may be eligible to apply for accreditation with the NSW Institute of Teachers following the successful completion of a recognised teaching qualification.

Admission

For local students admission is through UAC. Assumed knowledge: any 2 units of English. Recommended Studies: Personal Development, Health and Physical Education or Community and Family Studies

For international students, admission is through direct application to the university with IELTS equal to 6.5 or above.

Special Requirements

In order to enrol in Second Year Autumn units, all students must have: 1. National Police Check 2. Working with Children Check. In order to enrol in Second Year Spring units, all students must have: 1. First Aid Certificate 2. Child Protection Certificate.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Note: at least 60 credit points must be at Level 3 or above.

Note: For placement in schools, students must complete a Child Protection Policies and Procedures module. This requirement is completed through tutorials and assessment in 400871 Professional Health Competencies.

Sub-majors

In addition, all students must complete the mandatory sub-major in Education Studies (SM1100 Education Studies).

Students must meet this requirement by enrolling in 400808: Outdoor Recreation as one (10 credit points) of their SM1100 units while the remaining three units (30 credit points) are open to student choice from within the SM1100 framework.

SM1100.1	Education Studies

Recommended sequence

Start year

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400880.2	Fundamentals of Exercise Science
400871.2	Professional Health Competencies

Spring session

400808.4	Outdoor Recreation
400891.2	Movement and Skill Development

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice

Year 2

Autumn Session

400866.3	Culture, Diversity and Health
401055.1	Sport and Exercise Psychology

One unit from Education Studies sub-major

One unit for second teaching specialisation

Spring session

400892.2	Physical Activity, Nutrition and Health
400798.3	PDHPE: Games for Diverse Groups

One unit from Education Studies sub-major

One unit for second teaching specialisation

Year 3

Autumn session

401169.2	Coaching Sport and Recreation Activities
400894.2	Contemporary Youth Health Issues
400886.3	Motor Control and Skill Acquisition

One unit for second teaching specialisation

Spring session

400896.1	Gymnastics and Dance
401056.2	Applied Exercise Science for Personal Trainers and Coaches

One unit from Education Studies sub-major

One unit for second teaching specialisation

Mid-year intake

Year 1

Spring session

400808.4	Outdoor Recreation
400892.2	Physical Activity, Nutrition and Health
101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400880.2	Fundamentals of Exercise Science
400871.2	Professional Health Competencies

Year 2

Spring session

400891.2	Movement and Skill Development
400798.3	PDHPE: Games for Diverse Groups

One unit from Education Studies sub-major

One unit for second teaching specialisation

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 144

Autumn session

400866.3   Culture, Diversity and Health
401055.1   Sport and Exercise Psychology

One unit from Education Studies sub-major
One unit for second teaching specialisation

Year 3

Spring session

400896.1   Gymnastics and Dance
401056.2   Applied Exercise Science for Personal
Trainers and Coaches

One unit from Education Studies sub-major
One unit for second teaching specialisation

Autumn session

401169.1   Coaching Sport and Recreation Activities
400894.2   Contemporary Youth Health Issues
400886.3   Motor Control and Skill Acquisition

One unit for second teaching specialisation

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Health Science (Paramedicine)

4669.1

Paramedics play an integral role in the health system, responding to emergencies involving patients with acute and sub-acute health problems in a range of diverse and uncontrolled settings. Paramedics provide unscheduled, out-of-hospital care to patients of all ages, dealing with health complaints that span the spectrum of illness and injury severity and complexity. This contemporary course has a strong evidence-based focus and uses innovative blended learning and assessment strategies, together with diverse clinical placements, to develop high level practical and clinical decision making skills. Completion of the course will enable you to work effectively as a paramedic in an ambulance service, the private paramedical industry, or the defence forces.

Note: This course involves a mandatory health and medical assessment that must be completed prior to enrolling in 401067 Paramedic Practice 1 offered in Spring Year 1, and undertaking the associated ambulance service clinical placement. Students who are unable to pass the assessment by the end of Autumn session in the first year of the course will be required to take a leave of absence

pending re-assessment in the following year, or transfer to an alternative health science degree such as 4656 Bachelor of Health Science.

Study Mode
Three years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The Bachelor of Health Science (Paramedicine) has been granted preliminary approval for accreditation from the Council of Ambulance Authorities.

Inherent requirements
There are inherent requirements for this course that you must meet in order to complete your course and graduate. Make sure you read and understand the requirements for this course online.

Admission
Assumed knowledge, any 2 units of English.

Recommended studies, Mathematics, Physics and/or Biology.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements
In order to enrol in Second Semester First Year units, all students must have: 1. National Criminal Record Check (National Police Certificate), 2. Prohibited Employment Declaration Form prior to 1st June 2010 or a Working with Children Check Student Declaration after 1st June 2010. 3. First Aid Certificate (including cardiopulmonary resuscitation). Clinical placements are a mandatory component of this course. To be eligible for clinical placements, students must; 1. Comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. NSW Health can provide details of necessary vaccinations. 2. Receive a clearance from an authorised Western Sydney University-approved provider after

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 145

successfully completing a health/medical/fitness assessment as prescribed by the University. 3. Students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration. In clinical placement units, students must wear the Western Sydney University paramedicine uniform, which complies with NSW uniform requirements. This uniform will be purchased at the student's expense.

Course Structure

Qualification for this award requires the successful completion of 240 credit points as per the recommended sequence below.

Recommended sequence

Year 1

Autumn session

401066.1	Introduction to Paramedicine
400868.3	Human Anatomy and Physiology 1
400870.2	Population Health and Society
400871.2	Professional Health Competencies

Spring session

401067.2	Paramedic Practice 1
400869.3	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

401068.1	Paramedic Practice 2
401095.1	Mental Health and Substance Abuse
400138.3	Pathophysiology 1
400866.3	Culture, Diversity and Health

Spring session

401073.1	Paramedic Practice 3
401074.1	Out-of-hospital Medical Care 1
400981.2	Clinical Pharmacology
101614.2	Psychology and Health

Year 3

Autumn session

401069.1	Paramedic Practice 4
401096.1	Out-of-hospital Medical Care 2
401072.1	Obstetrics and Paediatrics
400864.3	Research Methods (Quantitative and Qualitative)

Spring session

401071.1	Traumatic and Environmental Emergencies
401097.1	Clinical Leadership and Patient Safety
400786.2	Professional Transition Project
400249.2	Ethical and Legal Issues in Health Care

Bachelor of Health Science (Sport and Exercise Science)

4658.4

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students whose commencement year in this course is 2015 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

Sport and exercise science encompasses the science that underpins health, physical activity and exercise, and their applications to the design, implementation and evaluation of exercise programs. There are a range of career options in health and fitness centres, for example as a personal trainer, a health and fitness specialist or a fitness assessor, in government agencies associated with sport, physical activity and health, in teaching and research, and with professional sporting groups, rehabilitation clinics and hospitals. If you gain higher-level accreditation as an exercise physiologist, you will also be able to provide healthcare services funded by Medicare (Australian Government).pharmaceutical, health or food industries. Alternatively, graduates who elect studies in the physical sciences, mathematics or business are well placed for careers in the manufacturing industry.

The course combines studies in exercise physiology, sports psychology, biomechanics motor control and exercise prescription with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. Facilities are state-of-the-art, centred on an Exercise and Sport Science Laboratory complex, and practical experience is a strong feature of the program.

Study Mode
Three years full-time. Students may choose to study at a reduced load.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The Bachelor of Health Science (Sport and Exercise Science) course is accredited at the level of exercise science by the National University Course Accreditation Program of Exercise and Sports Science Australia (ESSA). Graduates are eligible for exercise science accreditation.

Admission

Assumed Knowledge: Any 2 units of English

Recommended Studies: Any 2 units of English, plus four units of Science and/or Mathematics. PDHPE can be counted as a science unit for this course.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 146

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University

Special Requirements
In order to enrol in Second Year Autumn units, all students must have: 1. Working with Children Check Student Declaration 2. National Police Check 3. Adult Vaccination Record Card 4. First Aid Certificate

Course Structure
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Full-time

Year 1

Autumn session

400880.2	Fundamentals of Exercise Science
400868.3	Human Anatomy and Physiology 1
400866.3	Culture, Diversity and Health
400871.2	Professional Health Competencies

Spring session

400881.3	Functional Anatomy
400869.3	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
101614.2	Psychology and Health

Year 2

Autumn session

401140.1	Biomechanics
401142.1	Exercise Physiology
400883.3	Exercise Bioenergetics
401150.1	Exercise Testing and Measurement

Spring session

401143.1	Exercise Prescription I
401055.1	Sport and Exercise Psychology
401148.1	Strength and Conditioning
401141.1	Exercise Nutrition

Year 3

Autumn session

401144.1	Exercise Prescription II
401149.1	Exercise Physiology Across the Lifespan
400886.3	Motor Control and Skill Acquisition
400864.3	Research Methods (Quantitative and Qualitative)

Spring session

401147.1	Applied Biomechanics
401146.1	Applied Physiology
400904.1	Work Experience in Sport and Exercise Science
401145.1	Exercise for Health and Disease Prevention

Bachelor of Medical Science

3673.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2012 or later.

This degree comprises three major areas of study: biomedical science, medicinal chemistry and anatomy & physiology. The biomedical science major focuses on microbiology, biochemistry, molecular biology and aspects of health. The medicinal chemistry major focuses on chemistry and biochemistry, while the anatomy & physiology major focuses on anatomy, physiology and pharmacology. Graduates of this degree will find employment in areas such as medical research laboratories, hospital laboratories and in pathology laboratories and be well suited for positions in the pharmaceutical, medical sales and various research and quality control laboratories, as well as further study including research degrees, graduate pharmacy and graduate medicine degrees.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal

Accreditation
The Medicinal Chemistry major within the Bachelor of Medical Science is accredited by the Royal Australian Chemical Institute (RACI) for normal entry of a graduate to the Chartered Chemist qualification.

Admission
Assumed knowledge required: At least two of biology, chemistry, mathematics and physics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 147

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Start Year Intake

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300825.2	Introduction to Anatomy

Choose one of

| 300800.2 | Essential Chemistry 1 |
| 300808.2 | Introductory Chemistry |

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology

Choose one of

300830.2	Analysis of Change
300831.2	Quantitative Thinking
300672.2	Mathematics 1A
200263.5	Biometry

Year 2 - Year 3

Students must select one of the following Majors

Note: some units in the Medicinal Chemistry and Anatomy and Physiology majors will need to be taken at Campbelltown campus

M3060.1	Medicinal Chemistry
M3061.1	Anatomy and Physiology
M3062.1	Biomedical Science

Recommended Sequence

Mid Year Intake

The sequence of units for Year 1 for students Mid Year Intake is different for each major. Please see the details under each major in the links above.

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points) including the sub-majors listed below.

Sub-majors

SM3048.1	Climate Change
SM3044.1	Microbiology
SM3050.1	Physics

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Medical Science (Advanced)

3682.2

If you enjoy being constantly challenged and extended by your studies and are thinking about a career involving medical science or pharmaceutical research, then the Western Sydney University Medical Science (Advanced) degree is for you. This degree equips students with both specialised knowledge and enhanced inquiry skills in medicinal chemistry, biomedical science or anatomy and physiology. The Medical Science (Advanced) degree is designed to provide initial training for a range of careers in medical science while also allowing students to develop leadership and/or research skills. You can be partnered with experienced academic researchers and their research teams, and participate in the University's exciting research activities to facilitate your transition to postgraduate research studies or prepare you for a range of exciting career opportunities as high-achieving science graduates.

Further studies can be pursued (Masters (Honours) or PhD degree) leading to a research or academic career. Information and details on how to apply for Honours will be provided to you as you progress through your Bachelor degree, or you can find out more online.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 148

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Accreditation

The Medicinal Chemistry major for this degree is accredited by the Royal Australian Chemical Institute (RACI) for normal entry of a graduate to the Chartered Chemist qualification.

Admission

Assumed knowledge required: Minimum ATAR of 90 with assumed knowledge of HSC mathematics and at least two of biology, chemistry and/or physics. Students must maintain a Grade Point Average (GPA) of 5.0 or above to continue their enrolment in the course. As part of the admission/enrolment process students will be required to sign a statement acknowledging that they understand that a minimum 5.0 GPA is required to remain in the program and that if this GPA is not maintained that they will be automatically transferred into the standard program. Students in the base Bachelor of Medical Science suite of programs who achieve a GPA of 5.0 or greater at the end of their first year of study may be admitted into the Advanced Science program if sufficient places are available.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Western Sydney University Advanced Science Pathway - Applicants who complete Year 1 (full time) of either the Western Sydney University Bachelor of Science (Advanced Science) or Western Sydney University Bachelor of Medical Science (Advanced) will be considered for an interview if they achieve a GPA of 5.5 or more at the end of year 1 and have a total percentile of 50 or more in UMAT. There are a total of six spaces available for interview in this category (six in total, not six per course). If there are more eligible applicants than there are interview places, applicants will be ranked using their UMAT total percentile. Applicants in this category should apply in the same way as "local applicants".

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note: some units in the Medicinal Chemistry and Anatomy and Physiology majors will need to be taken at Campbelltown campus.

Medicinal Chemistry

Students completing the Bachelor of Medical Science (Advanced) with a major in Medicinal Chemistry will complete the following course structure.

M3094.1	Medicinal Chemistry

Anatomy and Physiology

Students completing the Bachelor of Medical Science (Advanced) with a major in Anatomy and Physiology will complete the following course structure.

M3095.1	Anatomy and Physiology

Biomedical Science

Students completing the Bachelor of Medical Science (Advanced) with a major in Biomedical Science will complete the following course structure.

M3096.1	Biomedical Science

Bachelor of Medical Science (Honours)

3610.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2011 or later.

The Honours program encourages independent learning and research, further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepens intellectual understanding in the major field of study and develops research skills. An Honours degree is a recognised point of entry for postgraduate research studies at PhD level and enhances a graduate's ability to perform at a high level in a commercial or public organisation. The Honours program consists of a rigorous program of supervised research on a medically related topic, culminating in the production of a thesis and presentation of a final seminar. Students enrol in a 60 credit point honours project and either a 20 credit point research methodology and experimental design unit or a 20 credit point advanced topics and research skills unit, allowing them to explore more advanced topics, including wider areas of research and their applications in science technology and medicine. Although the Honours course is available on several different campuses, some or all of the lectures, workshops and seminars may be held centrally at a single campus to ensure that students are exposed to as wide a range of research topics as possible. The course can provide opportunities for direct commercial and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 149

industrial involvement with a diverse range of organisations through the provision of, and joint supervision of, research projects.

Study Mode
One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Course Structure
Qualification for this award requires the successful completion of 80 credit points as per the recommended sequence below.

Please note: Students must enrol in 300747 Advanced Topics and Research Skills and 300412 Science, Technology and Environment Honours Projects in both 1H and 2H sessions.

Recommended Sequence

Full-time

Year 1

1H
300747.2	Advanced Topics and Research Skills
300412.3	Science, Technology and Environment Honours Project

2H
300747.2	Advanced Topics and Research Skills
300412.3	Science, Technology and Environment Honours Project

Part-time

Year 1

1H
300747.2	Advanced Topics and Research Skills

2H
300747.2	Advanced Topics and Research Skills

Year 2

1H
300412.3	Science, Technology and Environment Honours Project

2H
300412.3	Science, Technology and Environment Honours Project

Bachelor of Natural Science (Advanced)

3683.1

Our world and its resources are under ever increasing pressure, and we need enthusiastic, switched-on people with new ideas and innovative approaches to address these challenges. We are seeing a bigger population, technology advancements and environmental issues, all of which are placing unprecedented pressure on our natural resources and the biosphere. An Advanced degree in the Natural Sciences will enable you to understand these competing pressures and contribute to the development of sustainable strategies to drive change. This is a challenging program that will stretch you - it includes advanced coursework, extension activities and fundamental research training. You will be partnered with experienced academic researchers and contribute to the University's exciting research activities. The degree will allow you to undertake any of the Natural Science programs in Animal Science, Environmental Management or Sustainable Agriculture and Food Security. Students undertake three Advanced Science projects, Advanced Science Project A, B and C. An Honours year is available to high-achieving students and further studies can be pursued (Masters (Hon) or PhD degree) leading to a research or academic career.

Information and details on how to apply for Honours will be provided to you as you progress through your Bachelor degree, or you can find out more online.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Admission
Entry requirements: Minimum ATAR of 90 with assumed knowledge of HSC mathematics and at least two of biology, chemistry and/or physics. Students must maintain a Grade Point Average (GPA) of 5.0 or above to continue their enrolment in the course. As part of the admission/ enrolment process students will be required to sign a statement acknowledging that they understand that a minimum 5.0 GPA is required to remain in the program and that if this GPA is not maintained that they will be automatically transferred into the standard program.

Students in the base Natural science courses within the suite who achieve a GPA of 5.0 or greater at the end of their first year of study may be admitted into the Bachelor of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 150

Natural Science Advanced program if sufficient places are available.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

International applicants must apply directly to Western Sydney University via the International Office.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Details of minimum English proficiency requirements and acceptable proof can be found on the Universities Admissions Centre website (UAC).

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Students in the Bachelor of Natural Science (Advanced) must follow one of the listed study programs.

Students enrolled in the Bachelor of Natural Science (Advanced) must complete the units appropriate to their chosen study program and the three project units listed below. These Advanced Science Project units are taken in Semesters 3, 4 and 5.

300937.1	Advanced Science Project A
300938.1	Advanced Science Project B
300910.1	Advanced Science Project C

Bachelor of Natural Science (Animal Science)

3670.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2012 or later.

Interactions between people and animals are increasing due to our ever-increasing reliance on animals for companionship and food production, whilst we also strive to understand the pressures placed on our unique wildlife. A Bachelor of Natural Science (Animal Science) will enable you to develop a deep understanding of these issues, through studies of animal behaviour, animal health and welfare, animal nutrition, animal production, animal reproduction, human-animal interactions, vertebrate biodiversity, and wildlife science. Throughout your studies, you will have access to diverse on-campus animal facilities including reptiles, native mammals, horses, sheep, cattle and deer and off-campus animal professionals and organisations such as wildlife parks, zoos, farms and horse studs. There are a range of majors (conservation biology, zoology) and sub-majors (environmental sustainability and management) offered in Natural Science and Science that can add diversity and/or focus to your degree, to enable your degree to be matched to your career aspirations. A

variety of compelling and exciting career paths are available to graduates of this program, including international opportunities in the many fields of animal science.

Study Mode

Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Admission

Assumed Knowledge: Any two units of English and Mathematics.

Recommended Studies: One unit of Biology, Chemistry, Geography, Earth and Environmental Science or Agriculture.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Start Year Intake

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300807.1	Human Animal Interactions
300813.1	Wildlife Studies

Spring session

300810.1	Resource Sustainability
300831.2	Quantitative Thinking
300801.1	Animal Science

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 151

And one elective

Year 2

Autumn session

300931.1	Integrated Science
300834.1	Animal Health and Welfare
300853.1	Animal Nutrition and Feeding

And one elective

Spring session

300932.1	Natural Science Research Methods
300835.1	Animal Reproduction

Choose one of

300836.1	Botany
300838.1	Comparative Physiology

And one elective

Year 3

Autumn session

300913.1	Field Project 1
300878.1	Animal Behaviour
300854.1	Animal Production

And one elective

Spring session

300914.1	Field Project 2
300861.1	Vertebrate Biodiversity

And two electives

Mid Year Intake

Year 1

Spring session

300810.1	Resource Sustainability
300831.2	Quantitative Thinking
300801.1	Animal Science
300811.1	Scientific Literacy

Autumn session

300802.1	Biodiversity
300813.1	Wildlife Studies
300807.1	Human Animal Interactions

And one elective

Year 2

Spring session

300932.1	Natural Science Research Methods
300835.1	Animal Reproduction

Choose one of

300836.1	Botany
300838.1	Comparative Physiology

And one elective

Autumn session

300913.1	Field Project 1
300834.1	Animal Health and Welfare
300853.1	Animal Nutrition and Feeding
300931.1	Integrated Science

Year 3

Spring session

300914.1	Field Project 2
300861.1	Vertebrate Biodiversity

And two electives

Autumn session

300854.1	Animal Production
300878.1	Animal Behaviour

And two electives

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3049.1	Conservation Biology
M3056.1	Zoology

Sub-majors

SM3062.1	Aquatic Environments
SM3048.1	Climate Change
SM3042.1	Conservation Biology
SM3045.1	Zoology

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers majors and sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Natural Science (Environment and Health)

3672.1

The air we breathe, the water we drink, the food we eat, and the places we live, work and play all have major impacts on our health and well-being. Health scares such as swine/bird flu, obesity, cancers and asthma have all been connected to our environmental conditions. A

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 152

Bachelor of Natural Science (Environment and Health) will equip you to explore the diverse range of natural and built-environment challenges that confront us, from the mitigation of human health impacts of global climate change through to the more localised issues of air and water quality, waste management, food security, environmental noise and healthy communities. The major areas of study addressed within the program include air pollution; community studies; emergency management; environmental regulation and policy; environmental monitoring; environmental planning; environmental protection; epidemiology; food safety; noise, occupational environment; risk assessment; sustainable environmental management; toxicology; urban development and water pollution. A variety of fulfilling career paths are available to graduates of this program.

Study Mode

Three years full-time or six years in part-time external mode.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Part Time	External

Accreditation

This course is currently accredited by Environmental Health Australia.

Admission

Assumed Knowledge: Any two units of Mathematics and Science or equivalent.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

This course is not available to International Students.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Start Year Intake

Part-time

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy

Spring session

300821.1	Environment and Health

300814.1	Water Quality Assessment and Management

Year 2

Autumn session

300824.1	Management of Aquatic Environments
300840.1	Environmental Planning and Climate Change

Spring session

300810.1	Resource Sustainability
300831.2	Quantitative Thinking

Year 3

Autumn session

300931.1	Integrated Science
300808.2	Introductory Chemistry

Spring session

300932.1	Natural Science Research Methods
300841.1	Environmental Regulation and Policy

Year 4

Autumn session

300844.1	General Microbiology
300852.1	Air Quality and Climate Change

Spring session

300859.1	Food Safety
300877.1	Toxicology

Year 5

Autumn session

300872.1	Epidemiology
300919.1	Occupational Health and Safety

Spring session

300880.1	Disaster and Emergency Management
300867.1	Disease Prevention and Control

Year 6

Autumn session

300913.1	Field Project 1
300858.1	Environmental Risk Management

Spring session

300914.1	Field Project 2
300860.1	Urban Environment

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 153

Full-time

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300824.1	Management of Aquatic Environments
300808.2	Introductory Chemistry

Spring session

300810.1	Resource Sustainability
300831.2	Quantitative Thinking
300821.1	Environment and Health
300814.1	Water Quality Assessment and Management

Year 2

Autumn session

300931.1	Integrated Science
300872.1	Epidemiology
300840.1	Environmental Planning and Climate Change
300844.1	General Microbiology

Spring session

300932.1	Natural Science Research Methods
300877.1	Toxicology
300841.1	Environmental Regulation and Policy
300859.1	Food Safety

Year 3

Autumn session

300913.1	Field Project 1
300919.1	Occupational Health and Safety
300858.1	Environmental Risk Management
300852.1	Air Quality and Climate Change

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300867.1	Disease Prevention and Control
300880.1	Disaster and Emergency Management

Mid Year Intake

Part-time

Year 1

Spring session

300821.1	Environment and Health
300811.1	Scientific Literacy

Autumn session

300802.1	Biodiversity
300831.2	Quantitative Thinking

Year 2

Spring session

300810.1	Resource Sustainability
300877.1	Toxicology

Autumn session

300844.1	General Microbiology
300931.1	Integrated Science

Year 3

Spring session

300932.1	Natural Science Research Methods
300841.1	Environmental Regulation and Policy

Autumn session

300808.2	Introductory Chemistry
300840.1	Environmental Planning and Climate Change

Year 4

Q3 session

300880.1	Disaster and Emergency Management

Spring session

300859.1	Food Safety

Autumn session

300824.1	Management of Aquatic Environments
300852.1	Air Quality and Climate Change

Year 5

Spring session

300814.1	Water Quality Assessment and Management
300867.1	Disease Prevention and Control

Autumn session

300872.1	Epidemiology
300919.1	Occupational Health and Safety

Year 6

Spring session

300914.1	Field Project 2
300860.1	Urban Environment

Autumn session

300913.1	Field Project 1
300858.1	Environmental Risk Management

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 154

Full-time

Year 1

Spring session

300810.1	Resource Sustainability
300811.1	Scientific Literacy
300821.1	Environment and Health
300814.1	Water Quality Assessment and Management

Autumn session

300802.1	Biodiversity
300831.2	Quantitative Thinking
300824.1	Management of Aquatic Environments
300808.2	Introductory Chemistry

Year 2

Spring session

300932.1	Natural Science Research Methods
300877.1	Toxicology
300859.1	Food Safety
300841.1	Environmental Regulation and Policy

Autumn session

300913.1	Field Project 1
300931.1	Integrated Science
300840.1	Environmental Planning and Climate Change
300844.1	General Microbiology

Year 3

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300867.1	Disease Prevention and Control
300880.1	Disaster and Emergency Management

Autumn session

300872.1	Epidemiology
300919.1	Occupational Health and Safety
300858.1	Environmental Risk Management
300852.1	Air Quality and Climate Change

Bachelor of Natural Science (Environmental Management)

3671.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this coures was 2016 or later.

History has shown that if we don't effectively manage our environment, we will degrade it - possibly to the point where it can no longer sustain us. Environmental managers are concerned with ensuring the ecological sustainability of human development and minimising the size of our "ecological footprint". A Bachelor of Natural Science (Environmental Management) will develop your problem solving skills and equip you to work collaboratively with both community members and professional practitioners to develop innovative policy and strategies that address the increasingly complex causes of today's environmental problems. Issues include urban development, global climate change, persistent organic pollutants (POPs), decreasing biodiversity, deteriorating air and water quality, and sustainable use of natural resources. The major areas embodied within the program include assessment and management of aquatic environments water quality assessment and management; introduction to wildlife; sustainable land and resource use; Indigenous land management; environmental planning; climate change science; environmental regulation and policy; environmental risk management and urban development. The majors (aquatic and conservation biology) and sub-majors (environmental sustainability and management) offered in Natural Science and Science can add diversity and/or focus to your degree, to help match your studies to your career aspirations.

Study Mode

Three years full-time or six years part-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Accreditation

This course is accredited by Environmental Health Australia.

Admission

Assumed Knowledge: Any two units of Science (Biology or Chemistry recommended) and any two units of English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to the University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

SCHOOL OF SCIENCE AND HEALTH

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 155

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note - At least 60 credit points must be at Level 3 or above (one elective must be at least a Level 3 unit)

Year 1

Start Year Intake

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300813.1	Wildlife Studies
300824.1	Management of Aquatic Environments

Spring session

300810.1	Resource Sustainability
300831.2	Quantitative Thinking
300814.1	Water Quality Assessment and Management
300812.1	Understanding Landscape

Year 2

Autumn session

300931.1	Integrated Science
300840.1	Environmental Planning and Climate Change

And two electives

Spring session

300932.1	Natural Science Research Methods
300875.1	Landuse and the Environment
300841.1	Environmental Regulation and Policy
300959.1	Mangamai'bangawarra: Indigenous Science

Year 3

Autumn session

300913.1	Field Project 1
300858.1	Environmental Risk Management

And two electives

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300870.1	Water in the Landscape

And one elective

Mid Year Intake

Year 1

Spring session

300810.1	Resource Sustainability
300811.1	Scientific Literacy

300814.1	Water Quality Assessment and Management
300812.1	Understanding Landscape

Autumn session

300802.1	Biodiversity
300831.2	Quantitative Thinking
300813.1	Wildlife Studies
300824.1	Management of Aquatic Environments

Year 2

Spring session

300932.1	Natural Science Research Methods
300875.1	Landuse and the Environment
300841.1	Environmental Regulation and Policy

And one elective

Autumn session

300913.1	Field Project 1
300931.1	Integrated Science
300840.1	Environmental Planning and Climate Change

And one elective

Year 3

Spring session

300914.1	Field Project 2
300860.1	Urban Environment
300870.1	Water in the Landscape
300959.1	Mangamai'bangawarra: Indigenous Science

Autumn session

300858.1	Environmental Risk Management

And three electives

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3046.1	Aquatic Biology
M3049.1	Conservation Biology
M4011.1	Environmental Consulting

Sub-majors

SM3062.1	Aquatic Environments
SM3048.1	Climate Change
SM3042.1	Conservation Biology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 156

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Occupational Therapy

4711.1

Occupational therapy is a highly regarded field in which you can apply your knowledge and skills to provide therapy for people who, because of illness, injury or circumstances, are limited in their ability to perform everyday tasks. The program promotes the value of human diversity, fundamental human rights and the dignity and worth of every client. Occupational therapists find employment in public and private hospitals, rehabilitation centres, insurance companies, schools and large corporations.

The course in occupational therapy is offered as a Bachelor of Occupational Therapy. The first two years of the program combine studies in occupational therapy with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. The final two years focus predominately on occupational therapy practice skills, practical experience and specialised areas. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

An honours stream is available for high performing students. Students may also exit after year 3 with a Bachelor of Health Science degree but are unable to practice as an occupational therapist.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
This program is accredited by the Occupational Therapy Council as an approved program of study in Australia and graduates are eligible for professional registration by the Australian Health Practitioners Regulation Agency (AHPRA)

Admission
Assumed knowledge: any 2 units of English.

Recommended studies: Physics, Chemistry, Biology and/or Personal Development Health and Physical Education.

To be eligible to undertake fieldwork or practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of

minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office. International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements
To be able to enrol in the first year Spring unit 400907 Occupational Therapy Practice 1 and subsequent occupational therapy fieldwork units, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff.

Course Structure
Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Full-time

Year 1

Autumn session

400870.2	Population Health and Society
400868.3	Human Anatomy and Physiology 1
400160.4	Introduction to Occupational Therapy
400871.2	Professional Health Competencies

Spring session

400907.4	Occupational Therapy Practice 1
400869.3	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400908.2	People, Environment and Occupations
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 157

400866.3	Culture, Diversity and Health

Spring session

300754.3	Neuroanatomy
400881.3	Functional Anatomy
101614.2	Psychology and Health
400909.3	Occupational Therapy Practice 2

Year 3

Autumn session

400171.3	Occupation and Neurology
400169.3	Occupation and Mental Health
400910.1	Occupational Therapy Practice 3
400165.2	Occupation and the Environment

Spring session

400162.3	Child and Adolescent Occupations
400865.3	Evidence-Based Practice
400176.3	Occupation and Ageing
401121.1	Ergonomics and Work Occupations

At this point, students may exit with a Bachelor of Health Science

Year 4

Autumn session

401122.1	Occupational Therapy Project
401123.1	Occupational Justice
401124.1	Occupational Therapy Specialties
401125.1	Professional Reasoning

Spring session

401126.1	Occupational Therapy Practice 4A
401127.1	Occupational Therapy Practice 4B

Bachelor of Occupational Therapy (Honours)

4712.1

Occupational therapy is a highly regarded field in which you can apply your knowledge and skills to provide therapy for people who, because of illness, injury or circumstances, are limited in their ability to perform everyday tasks. The program promotes the value of human diversity, fundamental human rights and the dignity and worth of every client. Occupational therapists find employment in public and private hospitals, rehabilitation centres, insurance companies, schools and large corporations.

The course in occupational therapy is offered as a Bachelor of Occupational Therapy. The first two years of the program combine studies in occupational therapy with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. The final two years focus predominately on occupational therapy practice skills, practical experience and specialised areas. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

An honours stream is available for high performing students. Students may also exit after year 3 with a Bachelor of Health Science degree but are unable to practice as an occupational therapist.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
This program is accredited by the Occupational Therapy Council as an approved program of study in Australia and graduates are eligible for professional registration by the Australian Health Practitioners Regulation Agency (AHPRA)

Admission
Admission is through direct application to the university - applications are directed to the School of Science and Health.

Students must have completed 200 credit points in the first 2.5 years of the Western Sydney University Bachelor of Occupational Therapy course and high performing students are invited into the Bachelor of Occupational Therapy (Honours) program. Students with a GPA of 5 and above are eligible for invitation.

Special Requirements
To be able to enrol in the first year Spring unit 400907 Occupational Therapy Practice 1 and subsequent occupational therapy fieldwork units, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff.

Course Structure
Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended sequence

Year 1

Autumn session

400870.2	Population Health and Society
400868.3	Human Anatomy and Physiology 1
400160.4	Introduction to Occupational Therapy
400871.2	Professional Health Competencies

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 158

Spring session

400907.4	Occupational Therapy Practice 1
400869.3	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400908.2	People, Environment and Occupations
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

300754.3	Neuroanatomy
400881.3	Functional Anatomy
101614.2	Psychology and Health
400909.3	Occupational Therapy Practice 2

Year 3

Autumn session

400171.3	Occupation and Neurology
400169.3	Occupation and Mental Health
400910.1	Occupational Therapy Practice 3
400165.2	Occupation and the Environment

2H session

400944.2	Evidence-Based Practice (Advanced)

Spring session

400162.3	Child and Adolescent Occupations
400176.3	Occupation and Ageing
401121.1	Ergonomics and Work Occupations

Year 4

1H session

400945.1	Honours Research 1

Autumn session

401123.1	Occupational Justice
401125.1	Professional Reasoning

2H session

400946.1	Honours Research 2
401161.1	Occupational Therapy Practice 4 (Honours)

Bachelor of Physiotherapy

4706.1

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2015 or later.

Physiotherapy is a highly regarded profession and demand for physiotherapists is strong. Physiotherapists work in private practice, aged care settings, private and public hospitals, workplaces, community based agencies, schools, rehabilitation centres and chronic health management clinics. Patients range across the life span, from birth to athletes and the elderly. The course in physiotherapy is offered as a 4-year Bachelor of Physiotherapy. The first three years of the program combine studies in physiotherapy with a broad understanding of biomedicine and health science fields to develop the professional competencies important for ethical and safe practice, high quality care and the skills to work in multidisciplinary teams. The final year focuses predominately on the development of physiotherapy practice skills, which are used during clinical placements to treat patients in the community. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

The Honours program is available to high achieving students in the Bachelor of Physiotherapy. Honours is a key early step in the pathway to leadership in the profession and opens up the world of research, without taking any longer to complete the degree. Students apply for entry into the Honours program in year 3 of the degree. They begin advanced research training in the latter half of year 3. Clinical placements and an honours thesis are completed during the fourth year of the program. The thesis presents research that addresses real physiotherapy problems. This research will be conducted under the supervision of experienced academic researchers.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The Bachelor of Physiotherapy and Bachelor of Physiotherapy (Hons) are accredited by the Australian Physiotherapy Council and are approved programs of study by the Physiotherapy Board of Australia.

Admission
Assumed knowledge: any 2 units of English.

Recommended studies: Biology.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 159

International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to Western Sydney University should also use the information provided on the UAC website

Special Requirements

In order to enrol in Second Year Spring units, all students must have: National Police Certificate, Working with Children Check Student Declaration and First Aid Certificate (including cardiopulmonary resuscitation). To be eligible for clinical placements, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. NSW Health can provide details of necessary vaccinations. To meet NSW health requirements for clinical placements, second year students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. To be eligible to undertake field/work/practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration. In clinical placement units, students must wear the UWS physiotherapy uniform, which complies with NSW uniform requirements. Special note: Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

Course Structure

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Year 1

Autumn session

400870.2	Population Health and Society
400868.3	Human Anatomy and Physiology 1
400906.2	Introduction to Physiotherapy Practice
400871.2	Professional Health Competencies

Spring session

400881.3	Functional Anatomy
400869.3	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

401140.1	Biomechanics
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

300754.3	Neuroanatomy
400981.2	Clinical Pharmacology
101614.2	Psychology and Health
400982.3	Core Competencies in Physiotherapy Practice

Year 3

1H session

400984.1	Cardiorespiratory Physiotherapy
400986.1	Neurological Physiotherapy
400983.1	Orthopaedic Physiotherapy

Autumn session

400985.2	Clinical Education A

Spring session

400997.3	Exercise Rehabilitation
400998.2	Neurological Rehabilitation
400865.3	Evidence-Based Practice
400999.3	Musculoskeletal Physiotherapy

At this point, students may exit with a Bachelor of Health Science

Year 4

1H session

401106.1	Paediatric Physiotherapy
401107.1	Physiotherapy for Chronic Illness and Disease
401110.1	Clinical Education B (Rehabilitation)
401111.1	Clinical Education C (Ambulatory Care)

2H session

401108.1	Complex Cases and Professional Issues
401109.1	Integrating Research into Physiotherapy Practice
401112.1	Clinical Education D (Paediatrics)
401113.1	Clinical Education E (Advanced Care)

Bachelor of Physiotherapy (Honours)

4707.1

The Honours program is available to high achieving students in the Bachelor of Physiotherapy. Honours is a key early step in the pathway to leadership in the profession and opens up the world of research, without taking any longer to complete the degree. Students apply for entry into the Honours program in year 3 of the combined degree. They begin advanced research training in the latter half of year 3. Clinical placements and an honours thesis are completed during the fourth year of the program. The thesis presents research that addresses real physiotherapy problems. This research will be conducted under the supervision of experienced academic researchers.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 160

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The Bachelor of Physiotherapy and Bachelor of Physiotherapy (Hons) are accredited by the Australian Physiotherapy Council and are approved programs of study by the Physiotherapy Board of Australia.

Admission
Admission is through direct application to the university - applications are directed to the School of Science and Health.

Students must have completed 200 credit points in the first 2.5 years of the Western Sydney University Bachelor of Physiotherapy course and achieved a GPA of 6.0 or greater. Students with a GPA in the range of 5.0-6.0 and a credit average in units completed in Bachelor of Physiotherapy levels 2 and 3 will also be considered (in accordance with the Honours Policy clause 13 and the Graduations Policy clause 53).

Special Requirements
In order to enrol in Second Year Spring units, all students must have: National Police Certificate, Working with Children Check Student Declaration and First Aid Certificate (including cardiopulmonary resuscitation). To be eligible for clinical placements, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. NSW Health can provide details of necessary vaccinations. To meet NSW health requirements for clinical placements, second year students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. To be eligible to undertake field/work/practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration. In clinical placement units, students must wear the UWS physiotherapy uniform, which complies with NSW uniform requirements. Special note: Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

Course Structure
Qualification for this award requires the successful completion of 360 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Year 1

Autumn session

400870.2	Population Health and Society
400868.3	Human Anatomy and Physiology 1
400906.2	Introduction to Physiotherapy Practice
400871.2	Professional Health Competencies

Spring session

400881.3	Functional Anatomy
400869.3	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

401140.1	Biomechanics
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

300754.3	Neuroanatomy
400981.2	Clinical Pharmacology
101614.2	Psychology and Health
400982.3	Core Competencies in Physiotherapy Practice

Year 3

1H session

400984.1	Cardiorespiratory Physiotherapy
400986.1	Neurological Physiotherapy
400983.1	Orthopaedic Physiotherapy

Autumn session

400985.2	Clinical Education A

2H session

400944.2	Evidence-Based Practice (Advanced)

Spring session

400997.3	Exercise Rehabilitation
400998.2	Neurological Rehabilitation
400999.3	Musculoskeletal Physiotherapy

Year 4

1H session

400945.1	Honours Research 1
401106.1	Paediatric Physiotherapy
401107.1	Physiotherapy for Chronic Illness and Disease

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 161

| 401110.1 | Clinical Education B (Rehabilitation) |
| 401111.1 | Clinical Education C (Ambulatory Care) |

2H session

400946.1	Honours Research 2
401108.1	Complex Cases and Professional Issues
401109.1	Integrating Research into Physiotherapy Practice
401112.1	Clinical Education D (Paediatrics)
401113.1	Clinical Education E (Advanced Care)

Bachelor of Podiatric Medicine

4708.1

This version of the course is available to new and continuing students. Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in the course was 2015 or later.

Podiatrists are best known for treating problems that people experience with their feet and lower limbs, but they are increasingly playing an important role in addressing chronic conditions such as diabetes and rheumatology. Podiatrists treat a range of patients including children, adults, workers, sportspeople and the older population. There is a focus on podiatric applications including management of common problems such as ingrown toenails or bunions, chronic disease management, musculoskeletal rehabilitation, footwear assessment and orthoses fabrication. Over the course of the program students will complete 1000 hours clinical hours inclusive of Uniclinic sessions and 19 weeks of clinical placement in a range of facilities including hospitals, community centres, private practices, and sports medicine centres, in rural and metropolitan locations. Continuing education on completion of the program can lead to opportunities for advanced practice such as restricted therapeutic prescription rights and application for training as a podiatric surgeon. The course in podiatry is offered as a 4-year Bachelor of Podiatric Medicine. The first three years of the program combine studies in podiatry with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. The final year focuses predominately on podiatry practice skills, practical experience and specialised areas. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The University of Western Sydney Bachelor of Health Science (pass and honours)/Master of Podiatric Medicine and the Master of Podiatric Medicine are accredited programs of study and students are eligible to register with the Australian Health Practitioner Regulation Agency. This course has been accredited by Australia and New Zealand Podiatry Accreditation Council (ANZPAC).

Admission

Assumed knowledge: Any 2 unit of English

Recommended Studies: Mathematics, Physics and Biology

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements
In order to enrol in Second Year clinical units with clinical placement requirements, all students must have: National Police Certificate, Working with Children Check, Student Declaration, First Aid Certificate (including cardiopulmonary resuscitation). To be eligible for clinical placements, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. NSW Health can provide details of necessary vaccinations. To meet NSW health requirements for clinical placements, second year students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. To be eligible to undertake field/work/practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration. In clinical placement units, students must wear the UWS podiatric medicine uniform, which complies with NSW uniform requirements. Special note: Students in this program are required to participate fully in practical classes. This involves practical hands-on podiatry / lower extremity examination and treatment techniques on both genders and students will personally experience these techniques which will be performed on them by other students and/or relevant academic staff. Students are also required to undertake 19 weeks of clinical placement activity which can include rural and metropolitan locations. Student must meet their own travel, accommodation and living expenses during these activities.

Course Structure

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 162

Recommended Sequence

Year 1

Autumn session

400870.2	Population Health and Society
400868.3	Human Anatomy and Physiology 1
400905.2	Introduction to Podiatry
400871.2	Professional Health Competencies

Spring session

400881.3	Functional Anatomy
400869.3	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

1H Session

401181.1	Pathomechanics and Podiatric Medicine

Autumn session

401140.1	Biomechanics
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)

2H Session

400933.2	Podiatry Pre-Clinical
401180.1	Musculoskeletal Disorders and Imaging

Spring session

300754.3	Neuroanatomy
400981.2	Clinical Pharmacology

Year 3

1H session

400929.2	Podiatric Practice 1
401184.1	The High Risk Foot
401182.1	Pharmacology for Podiatrists

Autumn session

400866.3	Culture, Diversity and Health

2H session

400930.3	Podiatric Practice 2
401183.1	Podiatric Surgery

Spring session

101614.2	Psychology and Health
400865.3	Evidence-Based Practice

At this point, students may exit with the Bachelor of Health Science (no specialisation)

Year 4

1H Session

401115.1	Podiatric Paediatrics and Sports Medicine
401116.1	Dermatology and Gerontology
401117.1	Podiatric Clinical Block
401114.1	Podiatric Practice 3

2H Session

401119.1	Podiatric Professional Practice Studies
401117.1	Podiatric Clinical Block
401118.1	Podiatric Practice 4

And one elective

Students will exit with Bachelor of Podiatric Medicine

Bachelor of Podiatric Medicine (Honours)

4709.1

The Honours program is available to high achieving students in the Bachelor of Podiatric Medicine. Honours is a key early step in the path to leadership in the profession and opens up the world of research, without taking any longer to complete the degree. The honours program encourages independent learning, develops research skills and provides an opportunity for deeper investigation in the major field of study. An honours program is a recognised preparation and entry point for postgraduate research studies and the research training is valuable preparation for careers in research and development and analysis in the public and private sectors. Students apply for entry into the Honours program in year 3 of their degree. They begin advanced research training in the latter half of year 3. Clinical placements and an honours thesis are completed during the fourth year of the program. The thesis presents research that addresses real podiatric problems and education across the lifespan. This research will be conducted under the supervision of experienced academic researchers.

Study Mode
Four years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
The University of Western Sydney Bachelor of Health Science (pass and honours)/Master of Podiatric Medicine and the Master of Podiatric Medicine are accredited programs of study and students are eligible to register with the Australian Health Practitioner Regulation Agency.This course has been accredited by Australia and New Zealand Podiatry Accreditation Council (ANZPAC).

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 163

Admission

Admission is through direct application to the university - applications are directed to the School of Science and Health.

Students must have completed 200 credit points in the first 2.5 years of the Western Sydney University Bachelor of Podiatric Medicine course and achieved a GPA of 5.0 or greater. Students with a GPA in the range of 4.5-5.0 and a credit average in units completed in Bachelor of Podiatric Medicine levels 2 and 3 will also be considered (in accordance with the Honours Policy clause 13 and the Graduations Policy clause 53).

Special Requirements

In order to enrol in Second Year clinical units with clinical placement requirements, all students must have: National Police Certificate, Working with Children Check, Student Declaration, First Aid Certificate (including cardiopulmonary resuscitation). To be eligible for clinical placements, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. NSW Health can provide details of necessary vaccinations. To meet NSW health requirements for clinical placements, second year students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. To be eligible to undertake field/work/practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration. In clinical placement units, students must wear the UWS podiatric medicine uniform, which complies with NSW uniform requirements. Special note: Students in this program are required to participate fully in practical classes. This involves practical hands-on podiatry / lower extremity examination and treatment techniques on both genders and students will personally experience these techniques which will be performed on them by other students and/or relevant academic staff. Students are also required to undertake 19 weeks of clinical placement activity which can include rural and metropolitan locations. Student must meet their own travel, accommodation and living expenses during these activities.

Course Structure

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Year 1

Autumn session

400870.2	Population Health and Society
400868.3	Human Anatomy and Physiology 1
400905.2	Introduction to Podiatry
400871.2	Professional Health Competencies

Spring session

400881.3	Functional Anatomy
400869.3	Human Anatomy and Physiology 2
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

1H Session

401181.1	Pathomechanics and Podiatric Medicine

Autumn session

401140.1	Biomechanics
400138.3	Pathophysiology 1
400864.3	Research Methods (Quantitative and Qualitative)

2H Session

400933.2	Podiatry Pre-Clinical

Spring session

401180.1	Musculoskeletal Disorders and Imaging
300754.3	Neuroanatomy
400981.2	Clinical Pharmacology

Year 3

1H session

400929.2	Podiatric Practice 1
401184.1	The High Risk Foot

Autumn session

400866.3	Culture, Diversity and Health
401182.1	Pharmacology for Podiatrists

2H session

400930.3	Podiatric Practice 2

Spring session

401183.1	Podiatric Surgery
101614.2	Psychology and Health
400944.2	Evidence-Based Practice (Advanced)

At this point, students may exit with the Bachelor of Health Science (no specialisation)

Year 4

1H Session

401115.1	Podiatric Paediatrics and Sports Medicine
401116.1	Dermatology and Gerontology
401046.1	Honours Research 2 (Podiatric Medicine)
401114.1	Podiatric Practice 3

2H Session

401120.1	Clinical and Professional Practice (Honours)
401046.1	Honours Research 2 (Podiatric Medicine)
401118.1	Podiatric Practice 4

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 164

Students will exit with Bachelor of Podiatric Medicine (Honours)

Bachelor of Science

3675.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

Science asks questions about how the natural world works. It does so in a systematic, yet rigorously creative way based on inquiry and evidence for ideas. This approach has led to our current understanding of nature as being (in large part) systematic and predictable, and has underpinned major advances in human welfare. A Bachelor of Science will prepare you to take part in this process of enquiry, by both contributing to it and by using scientific knowledge to solve current problems. Students will learn core concepts and skills necessary for scientific inquiry: investigating the natural world, proposing and testing ideas by experimentation and observation; quantifying and modelling processes; communicating findings, thinking independently and critically. Students can enrol in a generalist Bachelor of Science or a Bachelor of Science in a specific discipline. Within each program students can select from a range of scientific disciplines to suit their interests, studying a core of basic science units to which other science units, and if desired, non-science units, can be added.

Study Mode
Three years full-time or six years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal

Admission

Assumed Knowledge: At least two of Biology, Chemistry, Mathematics and Physics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to Western Sydney University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points with no less than 60 credit points at Level 3, made up as follows

- At least 160 credit points made up of science units, following the rules below
- A further 80 credit points of electives (which can be science units, or units from another discipline area such as Arts, Law or Business)

Core components

Completion of the science units must comply with the following rules

Campus and semester(s) of offer for units are found under the active link for individual units

Level 1

Six Level 1 science foundation units must be completed, including

300811.1	Scientific Literacy

At least one mathematics or statistics foundation unit from the unit set below

300831.2	Quantitative Thinking
200263.5	Biometry
300830.2	Analysis of Change
200025.2	Discrete Mathematics
300672.2	Mathematics 1A
300673.2	Mathematics 1B

At least four other science foundation units from unit set below which must come from a further two science disciplines

Chemistry

300808.2	Introductory Chemistry

or

300800.2	Essential Chemistry 1
300803.1	Essential Chemistry 2

Biology

300802.1	Biodiversity
300816.1	Cell Biology
300818.1	Introduction to Physiology

Computer Science

300580.2	Programming Fundamentals
300134.2	Introduction to Information Technology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 165

301031.1	Computer Algebra

Physics

300828.1	Physics 1
300829.1	Physics 2

Level 2 and 3

The completion of at least one of the following majors

M3081.1	Marine Biology
M3090.1	Biochemistry and Molecular Biology
M3047.1	Chemistry
M3078.1	Climate Change
M3079.1	Conservation Biology
M3080.1	General Biology
M3100.1	Forensic Chemistry
M3054.1	Mathematics
M3099.1	Microbiology
M3089.1	Nutrition and Physiology
M3082.1	Zoology
M4011.1	Environmental Consulting

The completion of at least ten Level 2 or 3 science units from the senior unit sets below with at least four at Level 3 (Units within your major count towards this requirement)

At least one of the Level 3 units must be a Capstone unit

Senior unit set Level 2

300876.1	Organic Chemistry
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry
300930.1	Classical Physics and Advanced Technologies
300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300848.1	Metabolism
300817.1	Molecular Biology
300896.1	Microbiology 2
300838.1	Comparative Physiology
300847.2	Immunology
300837.1	Climate Change Science
300980.1	Principles of Evolution
300865.1	Plant Physiology
300836.1	Botany
300839.1	Ecology
300979.1	Principles of Zoology
300931.1	Integrated Science
300959.1	Mangamai'bangawarra: Indigenous Science
200027.2	Linear Algebra
200028.3	Advanced Calculus
200030.4	Differential Equations
301032.1	Making Sense of Data
301033.1	Introduction to Data Science
300832.1	Analytical Chemistry
300843.1	Forensic and Environmental Analysis

Note: Students may only choose one of 300832 Analytical Chemistry or 300843 Forensic and Environmental Anaylsis

Senior unit set Level 3

300919.1	Occupational Health and Safety
300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300912.1	Molecular Pharmacokinetics
300857.1	Environmental Geochemistry

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300923.1	Quantum Physics
300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
300905.1	Advanced Immunology
300826.1	Medical Microbiology
300856.1	Ecosystem Carbon Accounting
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology
200193.2	Abstract Algebra
301034.1	Predictive Modelling
200023.3	Analysis
301035.1	Environmental Informatics
200022.3	Mathematical Modelling

Capstone units

300851.1	Advanced Physiology
300866.1	Analytical Microbiology
300927.2	Molecular Medicine
300978.1	Marine and Aquatic Ecology
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change
300924.1	Science Research Project
300883.1	Laboratory Quality Management
200045.3	Quantitative Project

Recommended sequence

Full-time Start year entry

Year 1

Autumn session

300811.1	Scientific Literacy

Foundation science core
Foundation science core
And one elective

Spring session

Foundation science core
Foundation science core
Foundation science core
And one elective

Year 2

Autumn session

Senior science core
Senior science core
Senior science core
And one elective

Spring session

Senior science core
Senior science core
Senior science core
And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 166

Year 3

Autumn session

Senior science core
Senior science core
Level 3 elective
And one elective

Spring session

Senior science core
Senior science core
Level 3 elective
And one elective

Full-time Mid-year entry

Year 1

Spring session

300811.1   Scientific Literacy

Foundation science core
Foundation science core
And one elective

Autumn session

Foundation science core
Foundation science core
Foundation science core
And one elective

Year 2

Spring session

Any remaining Foundation core unit, or a Senior science core
Senior science core
Senior science core
And one elective

Autumn session

Senior science core
Senior science core
Senior science core
And one elective, or a Senior science core unit

Year 3

Spring session

Senior science core
Senior science core
Level 3 elective
And one elective

Autumn session

Senior science core
Senior science core
Level 3 elective
And one elective

Bachelor of Science - Pathway to Teaching (Secondary)

3638.6

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2015 or later.

The Bachelor of Science - Pathway to Teaching (Secondary) will allow you to focus on a science program of your choice and to structure your units of study to gain the necessary learning areas to satisfy the NSW Institute of Teachers discipline kowledge requirements for entry into teaching. It also gives the advantage of early access to Education Studies units through mandatory completion of an Education Studies submajor.

Graduates of this degree who complete the requisite units to meet the requirements of the Institute will receive guaranteed entry into the Master of Teaching.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Science (Chemistry) is accredited by The Royal Australian Chemical Institute Incorporated (RACI).

Admission
At least two of Biology, Chemistry, Mathematics (excluding General Mathematics) and Physics at HSC level.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office. International students can find details of minimum English proficiency requirements and acceptable proof on the International Office website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 167

Course Structure

Qualifying for this award requires successful completion of 240 credit points within the following rules

Students completing the biological sciences program must follow the course structure for 3677 Bachelor of Science (Biological Science) and enrol in the Specialistaion MT3006 - Biological Science

MT3006.1 Biological Sciences

Students completing the chemistry program must follow the course structure for 3676 Bachelor of Science (Chemistry) and enrol in the Specialisation MT3007

MT3007.1 Chemistry

Students completing the mathematical sciences program must follow the course structure for 3679 Bachelor of Science (Mathematical Science) and enrol in the Specialistaion MT3008

MT3008.1 Mathematical Science

Students completing other science programs must follow the course structure for 3675 Bachelor of Science

Sub-majors

In addition, all students must complete the mandatory 40 credit point sub-major in Education Studies (SM1100 Education Studies). Students must meet this requirement by choosing the units from SM1100 as electives within their Bachelor of Science program.

SM1100.1 Education Studies

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

SM3039.1 Statistics

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Advanced Science)

3562.9

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2016 or later.

If you enjoy being constantly challenged and extended by your studies and are thinking about a career involving scientific research, then the Western Sydney University Advanced Science degree is for you! This degree equips students with both specialised knowledge and enhanced inquiry skills in any one of a range of scientific disciplines. The Advanced Science degree is specifically designed to provide initial training for a range of scientific careers involving research and inquiry. You will be partnered with experienced academic researchers and their research teams and participate in the University's exciting research

activities to facilitate your transition to a Masters Research degree or directly into a range of exciting career opportunities available to high-achieving science graduates. Further studies can be pursued (Masters Research or PhD degree) leading to a research or academic career.

Study Mode

Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Hawkesbury Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation

The Bachelor of Science (Advanced Science) is accredited by the Royal Australian Chemical Institute (RACI) for normal entry of a graduate to the Chartered Chemist qualification.

Admission

Minimum ATAR of 90. Students must maintain a Grade Point Average (GPA) of 5.0 or above to continue their enrolment in the course. If this GPA is not maintained they will be automatically transferred into the standard program after one warning (one semester of further study). Students in other UWS science courses who achieve a GPA of 5.0 or greater at the end of their first year of study may be admitted into the Advanced Science program by invitation if sufficient places are available.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to Western Sydney University should also use the information provided on the UAC website.

International applicants must apply directly to the Western Sydney University via the International office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Students in the Bachelor of Science (Advanced Science) must follow one of the study programs listed below.

KP3027.1 General Program

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 168

KT3128.1	Biological Science
KT3129.1	Chemistry
KT3148.1	Environmental Science
KT3149.1	Forensic Science
KT3132.1	Nutrition and Food Science
KT3150.1	Mathematical Sciences
KT3134.1	Zoology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students in Advanced courses may use elective units toward obtaining an additional approved sub-major in Applied Leadership or Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Biological Sciences)

3677.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2014 or later

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

The biological sciences are diverse, fascinating, rapidly changing, and essential to our understanding of living systems at scales ranging from the molecular to the global. They play a vital role in our understanding of the environment, as well as animals, plants and micro-organisms, and are essential to a wide range of contemporary industries. A Bachelor of Science (Biological Science) offers a solid foundation in the basic sciences, including biology, microbiology, biochemistry and environmental science. You will be equipped to enter government, industry or research-based employment in this area (e.g. Biotechnology companies, pathology, quality assurance, university and hospital laboratories, scientific sales and government agencies).You may also choose to maximise the biological science content of your degree or combine biological sciences with studies in another discipline.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal

Campus	Attendance	Mode
Parramatta Campus	Part Time	Internal

Admission

Assumed Knowledge: At least two units of Biology, Chemistry, Mathematics and Physics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note: At least 60 credit points must be at Level 3 or above.

Year 1

Autumn session

| 300802.1 | Biodiversity |
| 300811.1 | Scientific Literacy |

Choose one of

| 300800.2 | Essential Chemistry 1 |
| 300808.2 | Introductory Chemistry |

Choose one of

| 300831.2 | Quantitative Thinking |
| 200263.5 | Biometry |

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 169

Year 2

Autumn session

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics

And one elective

Spring session

300817.1	Molecular Biology
300839.1	Ecology

Choose one of

300848.1	Metabolism
300896.1	Microbiology 2
300847.2	Immunology
300979.1	Principles of Zoology
300838.1	Comparative Physiology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200030.4	Differential Equations
200033.5	Applied Statistics
300959.1	Mangamai'bangawarra: Indigenous Science

And one elective

Year 3

Autumn session

Choose at least one capstone unit in your final year of study. Capstone units are listed separately below.

Hawkesbury Campus

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300856.1	Ecosystem Carbon Accounting
300919.1	Occupational Health and Safety

Capstone units

300866.1	Analytical Microbiology
300851.1	Advanced Physiology
300929.1	Aquatic Ecology

And two elective units (one elective must be a Level 3 unit)

Parramatta Campus

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology

Capstone unit

300851.1	Advanced Physiology

And two elective units (one elective must be a Level 3 unit)

Campbelltown Campus

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology

Capstone unit

300851.1	Advanced Physiology

And two elective units (one elective must be a Level 3 unit)

Spring session

Hawkesbury Campus

Choose at least two of

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology

Capstone units

300927.2	Molecular Medicine
300924.1	Science Research Project
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change
300883.1	Laboratory Quality Management

And two elective units (one elective must be a Level 3 unit)

Parramatta Campus

Choose at least two of

300905.1	Advanced Immunology
300826.1	Medical Microbiology

Capstone units

300855.1	Conservation Biology
300924.1	Science Research Project

And two elective units (one elective must be a Level 3 unit)

Campbelltown Campus

Choose at least two of

300905.1	Advanced Immunology
300826.1	Medical Microbiology

Capstone units

300927.2	Molecular Medicine
300924.1	Science Research Project

And two elective units (one elective must be a Level 3 unit)

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3081.1	Marine Biology
M3080.1	General Biology
M3079.1	Conservation Biology
M3090.1	Biochemistry and Molecular Biology
M3099.1	Microbiology
M3082.1	Zoology
M4011.1	Environmental Consulting

Sub-majors

SM3062.1	Aquatic Environments

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 170

SM3041.1   Biochemistry and Molecular Biology
SM3048.1   Climate Change
SM3042.1   Conservation Biology
SM3049.1   Immunology and Cell Biology
SM3044.1   Microbiology
SM3063.1   Zoology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Chemistry)

3676.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

A Bachelor of Science (Chemistry) will prepare you to take part in a process of inquiry, by both contributing to it and by using scientific knowledge to solve current problems. The Chemistry program provides a strong background in the key topic areas of contemporary chemistry, including aspects of chemical theory in analytical, inorganic, organic and physical chemistry, with a strong emphasis on practical laboratory skills, and applications in contemporary research, industry and the environment. A research project is available to students in the final year of the degree preparing you for a professional career in a wide range of chemistry based industries. A double major or sub-major with biochemistry and molecular biology or microbiology will prepare you for a career in the pharmaceutical, health or food industries. Alternatively, graduates who elect studies in the physical sciences, mathematics or business are well placed for careers in the manufacturing industry.

Study Mode

Three years full-time or six years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal

Accreditation

The Bachelor of Science (Chemistry) is accredited by The Royal Australian Chemical Institute (RACI).

Admission

Assumed Knowledge: At least two units of Biology, Chemistry, Mathematics and Physics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to Western Sydney University should also use the information provided on the UAC website.

International applicants must apply directly to the Western Sydney University via the International Office.

International students applying to the University through the International Office can find details of minimum English proficiency requirements and acceptable proof on the International Office website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note: At least 60 credit points must be at Level 3 or above, including one elective unit

Recommended Sequence

Year 1

Autumn session

300811.1   Scientific Literacy
300828.1   Physics 1

Choose one of

300800.2   Essential Chemistry 1
300808.2   Introductory Chemistry

Choose one of

300802.1   Biodiversity
300831.2   Quantitative Thinking
200263.5   Biometry
200025.2   Discrete Mathematics
300580.2   Programming Fundamentals
300134.2   Introduction to Information Technology

Spring session

300803.1   Essential Chemistry 2

Choose one of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 171

300672.2	Mathematics 1A
300830.2	Analysis of Change

Choose one of

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300673.2	Mathematics 1B
200263.5	Biometry
300580.2	Programming Fundamentals

And one elective

Year 2

Autumn session

300876.1	Organic Chemistry
300832.1	Analytical Chemistry

Choose at least one of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300931.1	Integrated Science
200027.2	Linear Algebra
200028.3	Advanced Calculus
301033.1	Introduction to Data Science

And one elective

Spring session

300899.1	Inorganic Chemistry
300849.2	Physical Chemistry

Choose at least one of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300839.1	Ecology
300847.2	Immunology
200030.4	Differential Equations
301032.1	Making Sense of Data
300959.1	Mangamai'bangawarra: Indigenous Science

And one elective

Year 3

Autumn session

300907.1	Advanced Inorganic Chemistry

Choose one of

300926.1	Advanced Physical Chemistry
300912.1	Molecular Pharmacokinetics

And two electives (one elective must be a Level 3 unit)

Spring session

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry

Capstone unit: choose one of

300924.1	Science Research Project
300883.1	Laboratory Quality Management

And one elective

Major and Sub-major elective spaces

Majors

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

M3090.1	Biochemistry and Molecular Biology
M3080.1	General Biology
M3099.1	Microbiology

Sub-majors

SM3041.1	Biochemistry and Molecular Biology
SM3049.1	Immunology and Cell Biology
SM3050.1	Physics

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Environmental Science)

3680.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

Solving the world's environmental problems will require professionals who are trained in the sciences underlying these issues and who understand the wider human and social contexts of the challenges faced. A Bachelor of Science (Environmental Science) will open up a wide range of career opportunities for those with environmental, conservation and ecological interests. A solid grounding in the underlying science is essential for people intending to work in this field, who will need to integrate knowledge across a range of disciplines, to devise solutions spanning the scientific and social issues involved. Some of the key areas in this degree include conservation biology, environmental analysis, regulation and policy, environmental chemistry, climate change science, microbiology, spatial data analysis, environmental geochemistry, biodiversity and adaptation, and ecology including marine and aquatic ecology. There are a range of majors (climate change and environmental management) and sub-majors (sustainability) offered in Science that can add diversity and/or focus to your degree. There are also a range of sub-majors from other disciplines such as the arts,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 172

business, humanities and social sciences to choose from, although these may require cross campus study and are subject to availability and timetabling.

Study Mode
Three years full-time or six years part-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal

Admission

Assumed Knowledge: Any two units of English and any two units of Science (Biology or Chemistry recommended).

Recommended Studies: Geography

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note: At least 60 credit points must be at Level 3 or above, including one elective unit

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300824.1	Management of Aquatic Environments

Choose one of

300808.2	Introductory Chemistry
300800.2	Essential Chemistry 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300810.1	Resource Sustainability

Choose one of

101646.2	Analysis of Spatial Data
300812.1	Understanding Landscape

Year 2

Autumn session

300837.1	Climate Change Science

Choose one of

300833.1	Microbiology 1
300843.1	Forensic and Environmental Analysis

Choose one of

300831.2	Quantitative Thinking
200263.5	Biometry

And one elective

Spring session

300839.1	Ecology
300841.1	Environmental Regulation and Policy

Choose one of

300836.1	Botany
300861.1	Vertebrate Biodiversity

And one elective

Year 3

Autumn session

300978.1	Marine and Aquatic Ecology
300857.1	Environmental Geochemistry
300856.1	Ecosystem Carbon Accounting

And one elective

Spring session

300855.1	Conservation Biology
300918.1	Invertebrate Biology
300909.1	Biological Adaptation to Climate Change

(Capstone unit)
And one elective

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3081.1	Marine Biology
M3078.1	Climate Change
M3079.1	Conservation Biology
M3080.1	General Biology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 173

| M3082.1 | Zoology |
| M3084.1 | Environmental Consulting |

Sub-majors

SM3062.1	Aquatic Environments
SM3048.1	Climate Change
SM3042.1	Conservation Biology
SM3079.1	Environmental Management
SM3044.1	Microbiology
SM3046.1	Sustainable Environmental Management
SM3063.1	Zoology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Forensic Science)

3589.7

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course was 2016 or later.

This is a three-year program that produces scientists who have a good background in the biological and chemical sciences. These are coupled with specialised expertise in forensic science including methods of forensic analysis, crime scene investigation, forensic photography, forensic investigation, crime and criminal justice and complex cases. Students may opt to further specialise in forensic biology, chemistry or microbiology by selecting additional electives or studies in a related or unrelated discipline. Career opportunities include forensic scientists, crime scene investigators, private investigators and consultants, police officers, drug analysts, researchers and academics, and specialised forensic science practitioners. The main employers of forensic scientists are State and Federal police services, State and Commonwealth Government Health Departments and analytical chemistry laboratories. Graduates will be versatile with a wide skills base with (depending on their choice of electives) potential for employment in analytical chemistry and microbiology, quality control and assurance, biochemistry and molecular biology, scientific research, education and the chemical industry.

Study Mode

Three years full-time or six years part-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Admission

Assumed Knowledge: Students should have successfully completed at least two of the following units: Biology, Chemistry or Mathematics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to Western Sydney University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to the University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Note: At least 60 credit points must be at Level 3 or above (one elective must be at least a Level 3 unit)

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300806.1	Forensic Science

Choose one of

| 300800.2 | Essential Chemistry 1 |
| 300808.2 | Introductory Chemistry |

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300874.2	Digital Forensic Photography
200263.5	Biometry

Year 2

Autumn session

300843.1	Forensic and Environmental Analysis
300845.1	Genetics
300825.2	Introduction to Anatomy

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 174

And one elective

Spring session

300873.2	Crime Scene Investigation
300817.1	Molecular Biology
401171.1	Imaging Science

And one elective

Year 3

Autumn session

300981.1	Environmental Forensic Investigations
300868.1	Forensic Chemistry
301120.1	Forensic Anthropology

And one elective unit

Spring session

300911.1	Complex Forensic Studies
401170.1	Forensic Biology
300883.1	Laboratory Quality Management

And one elective

Major

M4012.1	Crime Scene Investigation

Sub-majors

SM3041.1	Biochemistry and Molecular Biology
SM3044.1	Microbiology
SM3049.1	Immunology and Cell Biology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Honours)

3611.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2011 or later.

The Honours program encourages independent learning and research, further develops academic ability, provides the opportunity to pursue undergraduate studies to a more advanced level, deepens intellectual understanding in the major field of study and develops research skills. An Honours degree is a recognised point of entry for postgraduate research studies at PhD level and enhances a graduate's ability to perform at a high level in a commercial or public organisation. The Honours program consists of a rigorous program of supervised research on a scientific topic, culminating in the production of a thesis and presentation of a final seminar. Students enrol in a 60 credit point honours project and either a 20 credit point research methodology and experimental design unit, or a 20 credit point advanced topics and research skills unit, allowing them to explore more advanced topics, including wider areas of research and their applications in science, technology, medicine and the environment. Although the Honours course is available on several different campuses, some or all of the lectures, workshops and seminars may be held centrally at a single campus to ensure that students are exposed to as wide a range of research topics as possible. The course can provide opportunities for direct commercial and industrial involvement with a diverse range of organisations through the provision of, and joint supervision of, research projects.

Study Mode

One year full-time or two years part-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Course Structure

Qualification for this award requires the successful completion of 80 credit points as per the recommended sequence below.

Please note: Students must enrol in 300747 Advanced Topics and Research Skills and 300412 Science, Technology and Environment Honours Projects in both 1H and 2H sessions.

Recommended Sequence

Full-time

Year 1

1H

300412.3	Science, Technology and Environment Honours Project
300747.2	Advanced Topics and Research Skills

2H

300412.3	Science, Technology and Environment Honours Project
300747.2	Advanced Topics and Research Skills

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 175

Part-time

Year 1

1H

300747.2   Advanced Topics and Research Skills

2H

300747.2   Advanced Topics and Research Skills

Year 2

1H

300412.3   Science, Technology and Environment Honours Project

2H

300412.3   Science, Technology and Environment Honours Project

Bachelor of Science (Mathematical Science)

3679.3

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2015 or later.

A Bachelor of Science (Mathematical Science) provides you with a strong background in key analytical techniques that have contemporary applications such as the treatment and interpretation of data and the modelling of real-world problems such as global warming. You will develop skills that allow you to model and solve real world problems using mathematical techniques and have the opportunity to specialise in mathematics, statistics or a combination of both. This will provide you with a wide range of career options in commercial and government institutions, which require highly-skilled problem-solvers. There are also a range of majors (e.g. Biology, chemistry) and sub-majors offered in Science that can add diversity and/or focus to your degree. There are also a range of sub-majors from other disciplines such as the arts, business, humanities and social sciences to choose from, although these may require cross campus study and are subject to availability and timetabling.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Admission
Recommended Studies: Mathematics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300672.2   Mathematics 1A
300811.1   Scientific Literacy
200025.2   Discrete Mathematics

Choose one of

300802.1   Biodiversity
300800.2   Essential Chemistry 1
300828.1   Physics 1
300808.2   Introductory Chemistry

Spring session

301031.1   Computer Algebra
300673.2   Mathematics 1B
200263.5   Biometry

Choose one of the following science foundation core units

300816.1   Cell Biology
300803.1   Essential Chemistry 2
300829.1   Physics 2

Year 2

Autumn session

200027.2   Linear Algebra
200028.3   Advanced Calculus
300580.2   Programming Fundamentals

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 176

Spring session

200030.4	Differential Equations
301033.1	Introduction to Data Science
301032.1	Making Sense of Data

And one elective

Year 3

Autumn session

200193.2	Abstract Algebra
301034.1	Predictive Modelling
200023.3	Analysis

And one elective

Spring session

301035.1	Environmental Informatics
200022.3	Mathematical Modelling
200045.3	Quantitative Project

And one elective

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Nutrition and Food Sciences)

3678.2

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

There is more to healthy eating than you realise. This program will help you understand nutrition and the science behind food. A Bachelor of Science (Nutrition and Food Science) will prepare you for the future by developing the skills and knowledge to solve future challenges in nutrition and health, food quality and security. Students will develop a strong foundation in the biological and chemical sciences to needed underpin their studies, with majors in 'Human Nutrition' or 'Food Science and Technology' that will allow further specialisation. Career opportunities include community nutrition and health, health promotion, new food product development, quality assurance, and food technology secondary teaching. The program has strong industry and community links, well-equipped facilities including food processing pilot plant and modern kitchen facilities.

A major in Human Nutrition (M3059) investigates healthy eating as a vital part of good health. The major covers

nutrition, food and health, with specialised studies in community nutrition, public health nutrition, human physiology, health promotion and food studies. The major prepares students for careers in community nutrition, health promotion and education, or work in a range of food and nutrition related businesses, including new product development of healthy foods. Students seeking to do postgraduate studies in Nutrition and Dietetics are advised to select a double major of Nutrition and Physiology (M3058) with the Human Nutrition major and complete further studies in metabolism and advanced physiology.

A major in Food Science and Technology (M3057) explores the science behind food, its preparation and manufacture. The major covers specialised topics in food processing, food safety, quality assurance, new product development, postharvest, packaging, microbiological and chemical analysis. The major prepares students for a wide range of careers in the food and beverage related industries, including food product development, quality assurance, management of the fresh food supply, food regulations, research and development.

Students seeking to be secondary Food Technology teachers are advised to select a Sub-major in Education Studies (SM1100) in preparation for Master of Teaching in their fourth year of study. This program will satisfy the requirements of the NSW Institute of Teachers for first teaching areas of 'Food Technology' and 'Biology', with further teaching areas possible in 'chemistry', 'physics', or 'design and technology' depending on the electives selected.

Study Mode

Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal

Admission

Assumed Knowledge: At least two of the following subjects - 2 unit Biology, 2 unit Chemistry or 2 unit Mathematics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 177

qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Note 1: At least 60 credit points must be at Level 3 or above. Some students may need to take one elective as a Level 3 unit.

Note 2: Students must also satisfactorily complete a minimum of ten weeks Approved Industrial Experience, the time can be accrued throughout the duration of your course. The work experience will be recognised by achieving Satisfactory grade in the final semester core unit 300655 - Approved Industrial Experience.

Note 3: Students completing the SM1100 - Education Studies Sub-major will need to complete two units from the sub major instead of two electives from the recommended sequence below.

SM1100.1   Education Studies

Start Year Intake

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300831.2	Quantitative Thinking

Choose one of

| 300808.2 | Introductory Chemistry |
| 300800.2 | Essential Chemistry 1 |

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300805.1	Food Science 1

And one elective

Year 2

Autumn session

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300842.2	Food Science 2
300933.1	Nutrition and Health 1

Spring session

| 300879.1 | Experimental Foods |

Human Nutrition Major

| 300934.1 | Nutrition and Health 2 |
| 300818.1 | Introduction to Physiology |

And one elective

Food Science and Technology Major

| 300859.1 | Food Safety |
| 300869.1 | Postharvest |

And one elective

Year 3

Autumn session

| 300922.2 | Quality Assurance and Food Analysis |

Human Nutrition Major

| 300928.1 | Consumer Issues in Nutrition |
| 300871.1 | Culinary Science |

And one elective

Food Science and Technology major

| 300871.1 | Culinary Science |

Choose one of

| 300866.1 | Analytical Microbiology |
| 300843.1 | Forensic and Environmental Analysis |

Or Education Studies sub-major unit

And one elective

Spring session

| 300915.1 | Food Product Development |

All students must satisfactorily complete the unit 300655 - Approved Industrial Experience (10 weeks), comprising a minimum of ten weeks Approved Industrial Experience.

| 300655.2 | Approved Industrial Experience |

Human Nutrition Major

| 300908.1 | Applied Nutrition |
| 300917.1 | Global Nutrition, Food and Community |

And one elective

Food Science and Technology Major

| 300904.1 | Advanced Food Science and Technology |

Choose one of

| 300883.1 | Laboratory Quality Management |

Or Education sub-major unit

And one elective

Students seeking to be secondary Food Technology teachers are also able to select a Sub-major in Education Studies (SM1100) in preparation for Master of Teaching in the fourth year of study. This program will satisfy the requirements of the NSW Institute of Teachers for first teaching areas of 'Food Technology' and 'Biology', with further teaching areas possible in 'chemistry', 'physics', or 'design and technology' depending on the electives selected.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 178

SM1100.1   Education Studies

Recommended Sequence

Mid Year Intake

Year 1

Spring session

300816.1   Cell Biology
300811.1   Scientific Literacy
300831.2   Quantitative Thinking
300805.1   Food Science 1

Autumn session

300802.1   Biodiversity
300842.2   Food Science 2
300933.1   Nutrition and Health 1

Choose one of

300808.2   Introductory Chemistry
300800.2   Essential Chemistry 1

Year 2

Spring session

300879.1   Experimental Foods
300803.1   Essential Chemistry 2

Human Nutrition Major

300934.1   Nutrition and Health 2
300818.1   Introduction to Physiology

Food Science and Technology Major

300859.1   Food Safety
300869.1   Postharvest

Autumn session

300936.1   Functional Proteins and Genes
300833.1   Microbiology 1
300922.2   Quality Assurance and Food Analysis

And one elective

Year 3

Spring session

300915.1   Food Product Development

Human Nutrition Major

300908.1   Applied Nutrition
300917.1   Global Nutrition, Food and Community

And one elective

Food Science and Technology major

300904.1   Advanced Food Science and Technology
300883.1   Laboratory Quality Management

Or Education sub-major unit

And one elective

Autumn session

300871.1   Culinary Science

Students must also satisfactorily complete a minimum of 10 weeks Approved Industrial Experience, the time can be accrued throughout the duration of your course. The work experience will be recognised by achieving Satisfactory grade in the final semester core unit 300655 - Approved Industrial Experience.

300655.2   Approved Industrial Experience

Human Nutrition Major

300928.1   Consumer Issues in Nutrition

Food Science and Technology Major

Choose one of

300866.1   Analytical Microbiology
300843.1   Forensic and Environmental Analysis

Or Education Studies sub-major unit
And two electives

Students seeking to be secondary Food Technology teachers are also able to select a Sub-major in Education Studies (SM1100) in preparation for Master of Teaching in the fourth year of study. This program will satisfy the requirements of the NSW Institute of Teachers for first teaching areas of 'Food Technology' and 'Biology', with further teaching areas possible in 'chemistry', 'physics', or 'design and technology' depending on the electives selected.

SM1100.1   Education Studies

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3090.1   Biochemistry and Molecular Biology
M3057.1   Food Science & Technology
M3052.1   General Biology
M3059.1   Human Nutrition
M3099.1   Microbiology
M3089.1   Nutrition and Physiology

Sub-majors

SM3041.1   Biochemistry and Molecular Biology
SM1067.1   Education Studies
SM3038.1   Food Technology - Secondary Teaching
SM3049.1   Immunology and Cell Biology
SM3044.1   Microbiology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Students who maintain a GPA of 5 or higher may use elective units toward obtaining an additional approved sub-major in Critical Thinking.

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Zoology)

3681.2

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2014 onwards.

A Bachelor of Science (Zoology) recognises the increased demand for scientific knowledge of how to conserve, protect and care for animals, including native wildlife, and companion and production animals. It will enable you to develop an in--depth scientific understanding of how animals function and interact with their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organs systems, as well as the structure and function of biomolecules and cells. The key learning and research areas embodied in this degree are ecology, evolution, physiology, growth, reproduction, genetics, and conservation biology. On-campus animal facilities include those for reptiles, small marsupials, small rodents, horses, sheep and cattle, as well as over 1,000ha of native, rural and aquatic habitats.

Study Mode
Three years full-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal

Admission
Assumed Knowledge: Any two units of English and any two units of Science.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence
Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequences below.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300813.1	Wildlife Studies

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300801.1	Animal Science

Choose at least one of

300831.2	Quantitative Thinking
200263.5	Biometry

Year 2

Autumn session

300834.1	Animal Health and Welfare
300936.1	Functional Proteins and Genes
300980.1	Principles of Evolution

And one elective

Spring session

300979.1	Principles of Zoology
300838.1	Comparative Physiology
300839.1	Ecology

And one elective

Year 3

Autumn session

300878.1	Animal Behaviour
300978.1	Marine and Aquatic Ecology

And two electives

Spring session

300855.1	Conservation Biology
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity

Choose one of the following capstone units:

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 180

300909.1   Biological Adaptation to Climate Change
300924.1   Science Research Project

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3081.1	Marine Biology
M3090.1	Biochemistry and Molecular Biology
M3078.1	Climate Change
M3079.1	Conservation Biology
M3080.1	General Biology
M4011.1	Environmental Consulting

Sub-majors

SM3062.1	Aquatic Environments
SM3041.1	Biochemistry and Molecular Biology
SM3048.1	Climate Change
SM3042.1	Conservation Biology
SM3049.1	Immunology and Cell Biology
SM3044.1	Microbiology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science (Zoology) / Bachelor of Natural Science (Animal Science)

3732.1

The Bachelor of Science (Zoology)/Bachelor of Natural Science (Animal Science) recognises the increased demand for scientific knowledge about how to conserve and protect wildlife, as well as develop deeper understanding of the interactions between people and animals. This arises from our ever-increasing reliance on animals for companionship and food production. The combined Zoology and Animal Science Degree at Western Sydney University provides you with hands-on experience and a range of skills including specialist knowledge of wildlife and domesticated animals, practical skills, the ability to think critically and solve problems. Career opportunities exist in a range of areas including zoological research, environmental management and consulting, wildlife biology, government quarantine, agriculture, museums, and universities, as well as, international opportunities. On-campus animal facilities include those for reptiles, small marsupials, small rodents, horses, sheep and cattle, as well as over 1,000ha of native, rural and aquatic habitats. Fourth year options allow you to major in Conservation Biology, Marine Biology, Environmental Consulting, as well as specialise in companion/captive animal senior keeper/trainer Certificate and Diploma training packages from WSI TAFE

Study Mode

Four years full-time or eight years part-time.

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal

Admission

Assumed Knowledge: Any two units of English and any two units of Science.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC)

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Recommended Sequence

Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

NOTE: Students are required to complete 120 credit points of Level 3 units and above. To this end, At least two of the elective spots should be used to complete Level 3 units.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300813.1	Wildlife Studies

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300801.1	Animal Science

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 181

Choose one of

| 300831.2 | Quantitative Thinking |
| 200263.5 | Biometry |

Year 2

Autumn session

300834.1	Animal Health and Welfare
300936.1	Functional Proteins and Genes
300980.1	Principles of Evolution
300807.1	Human Animal Interactions

Spring session

300979.1	Principles of Zoology
300838.1	Comparative Physiology
300839.1	Ecology
300932.1	Natural Science Research Methods

Year 3

Autumn session

300878.1	Animal Behaviour
300978.1	Marine and Aquatic Ecology
300931.1	Integrated Science
300853.1	Animal Nutrition and Feeding

Spring session

300855.1	Conservation Biology
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity
300909.1	Biological Adaptation to Climate Change

Year 4

Autumn session

| 300854.1 | Animal Production |
| 300913.1 | Field Project 1 |

And two electives

Spring session

| 300835.1 | Animal Reproduction |
| 300914.1 | Field Project 2 |

And two electives

Major and Sub-major elective spaces

Elective units may be used toward obtaining an additional approved major (80 credit points) or sub-major (40 credit points) including the majors and sub-majors listed below.

Majors

M3081.1	Marine Biology
M3079.1	Conservation Biology
M3084.1	Environmental Consulting

TAFE Diploma of Animal Technology

* Certificate III in Animal Technology (ACM30210) TAFE WSI obtained concurrently through industry placement in 300913.1 Field Project 1 and 300914.1 Field Project 2

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Bachelor of Science/Bachelor of Arts

3658.6

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2016 or later.

This double degree program is designed for students whose interests span the Arts and Sciences. It will produce versatile graduates who can work across a range of academic and professional disciplines, including the opportunity to develop global perspectives and communication skills in an Asian language. In the Science area, students can design their own academic program within the Bachelor of Science course structure, which must include a science Major. This qualification in science can be combined with one of the following majors: International Relations and Asian Studies; Cultural and Social Analysis; English; History and Political Thought; Philosophy; Indigenous Australian Studies; Arabic, Chinese; Japanese; Indonesian; Islamic studies: Linguisitics; Psychological Studies.

Study Mode

Four years full-time or eight years part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Admission

Assumed Knowledge: At least two of Biology, Chemistry, Mathematics and Physics.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to Western Sydney University should also use the information provided on the UAC website.

International applicants must apply directly to the University via the International Office.

International students applying to Western Sydnsy University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 182

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 320 credit points as prescribed in the structure below. Students who complete this award will graduate with a Bachelor of Science and a Bachelor of Arts.

Note: At least 60 credit points must be at Level 3 or above.

Students who wish to exit this double degree after their third year and graduate with a Bachelor of Science must have completed 240 credit points and completed the units as listed below in Years 1, 2 and 3.

Students completing the Bachelor of Science portion of this double degree must complete one of the Science majors listed in the first three years of study.

The conceptual design of this Bachelor of Science/Bachelor of Arts double degree is as follows.

Years 1 to 3

Students will complete 160 credit points of Bachelor of Science units as listed in the course structure below.

In Years 1 to 4 they will complete the four Bachelor of Arts (BA) core units, eight Bachelor of Arts major units from one of the following Bachelor of Arts majors and four Bachelor of Arts sub-major units from one of the sub-majors listed:

BA Majors

- Arabic
- Chinese
- Cultural and Social Analysis
- English
- History and Political Thought
- Indigenous Australian Studies
- Indonesian
- International Relations and Asian Studies
- Islamic Studies
- Japanese
- Linguistics
- Philosophy
- Psychological Studies

BA sub-majors

- Arabic

- Chinese
- Cultural and Social Analysis
- English
- History and Political Thought
- Indigenous Australian Creative Expressions
- Indigenous Australian Studies
- Indigenous Economics
- Indonesian
- International Relations and Asian Studies
- Islamic Studies
- Japanese
- Linguistics
- Philosophy
- Psychological Studies

Arts Units

For details of the relevant Arts units, refer to the current listing of Bachelor of Arts.

Recommended Sequence

Science component

Students must study 16 Science units following one of the following Key Programs

- Bachelor of Science (Biological Sciences)
- Bachelor of Science (Chemistry)
- Bachelor of Science (Mathematical Science)
- Bachelor of Science (called 'Science' in the unit set structure below).

Students following the Bachelor of Science Key Program must choose five Level 1 units within the following rules

- At least one mathematics or statistics unit
- Remaining units must cover at least two of the following scientific disciplines: chemistry, biology, physics, computing

Students following the Bachelor of Science (Science) Key Program must also complete at least one of the Science specialisations (majors)

M3090.1	Biochemistry and Molecular Biology	
M3080.1	General Biology	
M3047.1	Chemistry	
M3054.1	Mathematics	

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 183

And one Level 3 capstone unit.

Consult the handbook entry for the Bachelor of Science degree course for further details about the science majors.

Year 1

Autumn session

Choose two core Arts units from

100960.2	Contemporary Society
100846.2	Analytical Reading and Writing
100958.2	Australia and the World
100968.3	Texts and Traditions

Choose two science units relevant to the Key Program as follows

Biological Sciences Key Program

300802.1	Biodiversity

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Chemistry Key Program

300800.2	Essential Chemistry 1
300828.1	Physics 1

Mathematical Science Key Program

300672.2	Mathematics 1A
200025.2	Discrete Mathematics

Science Key Program

Biochemistry and Molecular Biology specialisation

300802.1	Biodiversity

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Chemistry specialisation

300800.2	Essential Chemistry 1

And one science unit from the list below
General Biology specialisation

300802.1	Biodiversity

And one science unit from the list below
Mathematics specialisation

300672.2	Mathematics 1A
200025.2	Discrete Mathematics

List of science units

300802.1	Biodiversity
300828.1	Physics 1
300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Note: choose one chemistry unit only

Spring session

Choose two core Arts units from

100958.2	Australia and the World
100968.3	Texts and Traditions
100960.2	Contemporary Society
100846.2	Analytical Reading and Writing

Choose two science units relevant to the Key Program as follows

Biological Sciences Key Program

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Chemistry Key Program

300803.1	Essential Chemistry 2

Choose one of

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300831.2	Quantitative Thinking

Mathematical Sciences Key Program

300673.2	Mathematics 1B
200263.5	Biometry

Science Key Program

Biochemistry and Molecular Biology specialisation

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Chemistry specialisation

300803.1	Essential Chemistry 2

And one science unit from the list below
General Biology specialisation

300816.1	Cell Biology

And one science unit from the list below
Mathematics specialisation

300673.2	Mathematics 1B

And one science unit from the list below
List of science units

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300829.1	Physics 2

Year 2

Autumn session

One Arts major or sub-major unit

Choose three science units relevant to the Key Program as follows

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 184

Biological Sciences Key Program

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics

Chemistry Key Program

| 300876.1 | Organic Chemistry |
| 300832.1 | Analytical Chemistry |

Choose one of

| 300830.2 | Analysis of Change |
| 300672.2 | Mathematics 1A |

Mathematical Science Key Program

200027.2	Linear Algebra
200028.3	Advanced Calculus
301033.1	Introduction to Data Science

Science Key Program: non-mathematics specialisations

Biochemistry and Molecular Biology, Chemistry, General Biology specialisations

Choose at least one Level 1 mathematics unit from the list below in either semester in second year

Mathematics units

300831.2	Quantitative Thinking
300830.2	Analysis of Change
300672.2	Mathematics 1A
200263.5	Biometry
200025.2	Discrete Mathematics

Choose two science units if completing a mathematics unit in Autumn, or three science units otherwise

Science units

300936.1	Functional Proteins and Genes
300845.1	Genetics
300865.1	Plant Physiology
300833.1	Microbiology 1
300931.1	Integrated Science
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300930.1	Classical Physics and Advanced Technologies

Science Key Program: Mathematics specialisation

| 200027.2 | Linear Algebra |
| 200028.3 | Advanced Calculus |

And one unit from the list below

300802.1	Biodiversity
300828.1	Physics 1
300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

One Arts major or sub-major unit

Choose three science units relevant to the Key Program as follows

Biological Sciences Key Program

| 300817.1 | Molecular Biology |

Choose one of

300848.1	Metabolism
300896.1	Microbiology 2
300847.2	Immunology
300838.1	Comparative Physiology
300839.1	Ecology

And choose one of

| 300831.2 | Quantitative Thinking |
| 200263.5 | Biometry |

Chemistry Key Program

| 300899.1 | Inorganic Chemistry |
| 300849.2 | Physical Chemistry |

Choose one of

300838.1	Comparative Physiology
300839.1	Ecology
200030.4	Differential Equations
301032.1	Making Sense of Data

Mathematical Science Key Program

| 200030.4 | Differential Equations |
| 301032.1 | Making Sense of Data |

Choose one of

| 300816.1 | Cell Biology |
| 300803.1 | Essential Chemistry 2 |

Science Key Program: non-mathematics specialisations

Biochemistry and Molecular Biology, Chemistry, General Biology specialisations

Choose one mathematics unit and two science units or three science units (if mathematics unit completed in Autumn)

Science units

300848.1	Metabolism
300896.1	Microbiology 2
300847.2	Immunology
300838.1	Comparative Physiology
300817.1	Molecular Biology
300839.1	Ecology
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry

Science Key Program: Mathematics specialisation

| 200030.4 | Differential Equations |

Choose two of

301032.1	Making Sense of Data
300838.1	Comparative Physiology
300839.1	Ecology
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 185

Year 3

Autumn session

One Arts major or sub-major unit

Science capstone units: select at least one capstone unit in either semester of Year 3

Choose three science units relevant to the Key Program as follows

Biological Sciences Key Program

Choose three of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300919.1	Occupational Health and Safety
300819.1	Topics in Physiology

Capstone units

300851.1	Advanced Physiology
300866.1	Analytical Microbiology
300978.1	Marine and Aquatic Ecology

Chemistry Key Program

300907.1	Advanced Inorganic Chemistry
300857.1	Environmental Geochemistry

Choose one of

300926.1	Advanced Physical Chemistry
300912.1	Molecular Pharmacokinetics

Mathematical Science Key Program

200193.2	Abstract Algebra
200023.3	Analysis
301034.1	Predictive Modelling

Science Key Program

Choose three of

300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300857.1	Environmental Geochemistry
300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
200193.2	Abstract Algebra
200023.3	Analysis
301034.1	Predictive Modelling

Capstone units

300851.1	Advanced Physiology
300866.1	Analytical Microbiology
300978.1	Marine and Aquatic Ecology

Spring session

One Arts major or sub-major unit

Choose three science units as follows

Biological Sciences Key Program

Choose three of

300905.1	Advanced Immunology

300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology

Capstone units

300927.2	Molecular Medicine
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change
300924.1	Science Research Project
300883.1	Laboratory Quality Management

Chemistry Key Program

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry

Capstone units

Choose one of

300924.1	Science Research Project
300883.1	Laboratory Quality Management

Mathematical Science Key Program

200022.3	Mathematical Modelling
301035.1	Environmental Informatics

Capstone unit

200045.3	Quantitative Project

Science Key Program

Choose three of

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300923.1	Quantum Physics
200022.3	Mathematical Modelling
301035.1	Environmental Informatics

Capstone units

300927.2	Molecular Medicine
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change
300924.1	Science Research Project
300883.1	Laboratory Quality Management
200045.3	Quantitative Project

Year 4

Autumn session

Four Bachelor of Arts major or sub-major units

Spring session

Four Bachelor of Arts major or sub-major units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 186

Bachelor of Science/Bachelor of Business

4748.1

The Bachelor of Science/Bachelor of Business double degree program allows graduates to span both the commercial and scientific worlds in a way that single degree graduates cannot. The double degrees permit students to undertake multi-skilling, and offer diverse career paths providing high marketability in multiple areas of expertise. Graduates will have a solid grounding in a core science discipline such as Biological Sciences, Chemistry or Mathematics. This qualification in science is combined with one of the following Majors from the Bachelor of Business: Applied Finance; Economics; Hospitality Management; Human Resource Management; International Business; Management; Marketing; Sport Management. Graduates will be equipped to work as scientists, with a good understanding of business principles and practices. Alternatively, as Business graduates they will be well-prepared to work in science-based industries and institutions.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal
Parramatta Campus	Full Time	Internal

Accreditation
The Bachelor of Science (Chemistry) is accredited by The Royal Australian Chemical Institute (RACI). Major MT2021 Applied Finance satisfies the educational requirements for membership of the Financial Services Institute of Australasia (Finsia). Major MT2024 Human Resource Management - the School of Business will seek to have the Bachelor of Business (Human Resource Management) accredited with the Australian Human Resources Institute (AHRI). Major MT2025 International Business satisfies the educational requirements for membership of the Australian Institute of Export. Major MT2027 Marketing satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute (AMI).

Admission
Eligibility for admission to the Bachelor Science/Bachelor of Business is based on the following requirements

Bachelor of Science assumed knowledge: At least two of Biology, Chemistry, Mathematics, Physics at HSC level.

Bachelor of Business assumed knowledge: HSC Mathematics and any two units of HSC English.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English.

Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to Western Sydney University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to Western Sydney University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure
Qualification for this award requires the successful completion of 320 credit points as prescribed in the structure below.

Students who complete this award will graduate with a Bachelor of Science and a Bachelor of Business.

Science component
Students must complete 16 Science units following one of the following programs

Students following the Bachelor of Science (Science) program must complete all three parts listed below

Part 1: Five Level 1 units within the following rules

- At least one mathematics or statistics unit

- Remaining units must cover at least two of the scientific disciplines of chemistry, biology, physics, computing

Part 2: At least one of the Science specialisations/majors

M3045.1	Biochemistry and Molecular Biology
M3080.1	General Biology
M3047.1	Chemistry
M3054.1	Mathematics

Part 3: One level 3 capstone unit

Consult the handbook entry for the Bachelor of Science degree course for further details about the science majors.

Business component
The four compulsory core units (40 credit points) that provide students with essential business knowledge are

200909.1	Enterprise Law
200910.1	Financing Enterprises
200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership

Professional units (Choose 40 credit points)

The professional units provide a focus on careers. Students are required to complete one unit from each of the four key focus areas: numeracy, career planning, innovation, and enterprise engagement, a total of 40 credit points. Students are advised to choose units that will support careers in one of three areas: Money (for majors in Applied Finance, Economics), Markets (for majors in Hospitality

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 187

Management, International Business, Marketing, and Sport Management), Management (for majors in Human Resource Management, and Management). The professional units that are recommended for each of the Bachelor of Business testamur majors are specified in the majors.

Majors (Choose 80 credit points from one primary Business major. These are testamur majors)

Majors for Careers in Money

MT2021.1	Applied Finance
MT2022.1	Economics

Majors for Careers in Markets

MT2023.1	Hospitality Management
MT2025.1	International Business
MT2027.1	Marketing
MT2029.1	Sport Management

Majors for Careers in Management

MT2024.1	Human Resource Management
MT2026.1	Management

Recommended Sequence

Use the links above to see the Core, Professional and Major units required for each B Bus Major. Students should follow the recommended sequence below and not the recommended sequence listed under each B Bus Major.

This progression pattern is highly recommended. Students progress through both degrees at the same pace, completing two units in each degree in each semester. Graduation after three years with either degree will be possible only if a student makes this decision at or before the end of year 2 and amends their progression pattern as prescribed by an Academic Course Advisor.

Year 1

Autumn session

Bachelor of Business Units

• BBus Core unit 1

• BBus Core unit 2

Students must select Bachelor of Science units depending on their major

Biological Sciences Key Program

300802.1	Biodiversity

Choose one of

300808.2	Introductory Chemistry
300800.2	Essential Chemistry 1

Chemistry Key Program

300800.2	Essential Chemistry 1
300828.1	Physics 1

Mathematics Key Program

300672.2	Mathematics 1A
200025.2	Discrete Mathematics

Science Key Program

Choose two of

300802.1	Biodiversity
300828.1	Physics 1
300831.2	Quantitative Thinking
300830.2	Analysis of Change
300672.2	Mathematics 1A
200025.2	Discrete Mathematics
300808.2	Introductory Chemistry

Or

300800.2	Essential Chemistry 1

Note: Students may only choose one chemistry unit. Choose from 300808 - Introductory Chemistry or 300800 - Essential Chemistry 1

Spring session

Bachelor of Business Units

• BBus Core unit 3

• BBus Core unit 4

Students must select Bachelor of Science units depending on their major

Biological Sciences Key Program

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Chemistry Key Program Units

300803.1	Essential Chemistry 2

Choose one of

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300831.2	Quantitative Thinking

Mathematics Key Program

300673.2	Mathematics 1B
200263.5	Biometry

Science Key Program

Choose two of

300803.1	Essential Chemistry 2
300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300831.2	Quantitative Thinking
200263.5	Biometry
300672.2	Mathematics 1A
300673.2	Mathematics 1B

Year 2

Autumn session

Bachelor of Business Units

• BBus Professional unit 1

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 188

• BBus Major unit 1

Students must select Bachelor of Science units depending on their major

Biological Sciences Key Program

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1

Chemistry Key Program

300832.1	Analytical Chemistry
300876.1	Organic Chemistry

Choose one of

300672.2	Mathematics 1A
300830.2	Analysis of Change

Mathematics Key Program

300580.2	Programming Fundamentals

Choose one of

300802.1	Biodiversity
300828.1	Physics 1
300134.2	Introduction to Information Technology
300808.2	Introductory Chemistry
300800.2	Essential Chemistry 1

Science Key Program

Choose one of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300931.1	Integrated Science
300832.1	Analytical Chemistry
300876.1	Organic Chemistry
200027.2	Linear Algebra
200028.3	Advanced Calculus
301033.1	Introduction to Data Science

Choose one of

300802.1	Biodiversity
300828.1	Physics 1
300831.2	Quantitative Thinking
300830.2	Analysis of Change
300672.2	Mathematics 1A
200025.2	Discrete Mathematics
300808.2	Introductory Chemistry

Or

300800.2	Essential Chemistry 1

Note: Students may only choose one chemistry unit. Choose from 300808 - Introductory Chemistry or 300800 - Essential Chemistry 1

Spring session

Bachelor of Business Units

• BBus Professional unit 2

• BBus Major unit 2

Students must select Bachelor of Science units depending on their major

Biological Sciences Key Program

300817.1	Molecular Biology

Choose one of

300831.2	Quantitative Thinking
200263.5	Biometry

Chemistry Key Program

Choose one of

300899.1	Inorganic Chemistry
300849.2	Physical Chemistry

Choose one of

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300580.2	Programming Fundamentals
300134.2	Introduction to Information Technology

Mathematics Key Program

200030.4	Differential Equations

Chioose one of

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300829.1	Physics 2
300134.2	Introduction to Information Technology
301033.1	Introduction to Data Science

Science Key Program

Choose two of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300847.2	Immunology
300839.1	Ecology
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry
200030.4	Differential Equations
301032.1	Making Sense of Data

Year 3

Autumn session

Bachelor of Business Units

• BBus Major unit 3

• BBus Major unit 4

Students must select Bachelor of Science units depending on their major

Biological Sciences Key Program

300845.1	Genetics

Choose one of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 189

| 300865.1 | Plant Physiology |
| 300931.1 | Integrated Science |

Chemistry Key Program
Choose one of

| 300876.1 | Organic Chemistry |
| 300832.1 | Analytical Chemistry |

Choose one of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300931.1	Integrated Science

Mathematics Key Program

| 200027.2 | Linear Algebra |
| 200028.3 | Advanced Calculus |

Science Key Program
Choose two of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300931.1	Integrated Science
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
200027.2	Linear Algebra
200028.3	Advanced Calculus
301033.1	Introduction to Data Science

Spring session

Bachelor of Business Units
• BBus Major unit 5

• BBus Major unit 6

Students must select Bachelor of Science units depending on their major

Biological Sciences Key Program
Choose one of

300848.1	Metabolism
300896.1	Microbiology 2
300838.1	Comparative Physiology
300847.2	Immunology
300839.1	Ecology

Choose one of

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300855.1	Conservation Biology

Chemistry Key Program
Choose one of

| 300899.1 | Inorganic Chemistry |
| 300849.2 | Physical Chemistry |

Choose one of

| 300925.1 | Advanced Analytical Chemistry |
| 300906.1 | Advanced Organic Chemistry |

Mathematics Key Program

| 200022.3 | Mathematical Modelling |
| 301032.1 | Making Sense of Data |

Science Key Program
Choose one of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300847.2	Immunology
300839.1	Ecology
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry
200030.4	Differential Equations
301032.1	Making Sense of Data

Choose one of

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300855.1	Conservation Biology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
301035.1	Environmental Informatics
200022.3	Mathematical Modelling

Year 4

Autumn session

Bachelor of Business Units
• BBus Professional unit 3

• BBus Major unit 7

Students must select Bachelor of Science units depending on their major

Biological Sciences Key Program
Choose two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology

Chemistry Key Program

| 300907.1 | Advanced Inorganic Chemistry |

Choose one of

| 300926.1 | Advanced Physical Chemistry |
| 300912.1 | Molecular Pharmacokinetics |

Mathematics Key Program
Choose two of

200193.2	Abstract Algebra
301034.1	Predictive Modelling
200023.3	Analysis

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 190

Science Key Program

Choose two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
300907.1	Advanced Inorganic Chemistry
200193.2	Abstract Algebra
301034.1	Predictive Modelling
200023.3	Analysis
300926.1	Advanced Physical Chemistry

Or

| 300912.1 | Molecular Pharmacokinetics |

Note: Students may only choose one unit from 300926 - Advanced Physical Chemistry or 300912 - Molecular Pharmacokinetics

Spring session

Bachelor of Business Units

• BBus Professional unit 4

• BBus Major unit 8

Students must select Bachelor of Science units depending on their major

Biological Sciences Key Program

Choose two of

| 300927.2 | Molecular Medicine |

(Capstone unit)

| 300924.1 | Science Research Project |

(Capstone unit)

| 300855.1 | Conservation Biology |

(Capstone unit)

| 300905.1 | Advanced Immunology |
| 300826.1 | Medical Microbiology |

Chemistry Key Program

Choose two of

| 300924.1 | Science Research Project |

(Capstone unit)

| 300883.1 | Laboratory Quality Management |

(Capstone unit)

| 300925.1 | Advanced Analytical Chemistry |
| 300906.1 | Advanced Organic Chemistry |

Mathematics Key Program

| 200045.3 | Quantitative Project |

(Capstone unit)

| 301035.1 | Environmental Informatics |

Science Key Program

Choose two of

| 300855.1 | Conservation Biology |

(Capstone unit)

| 300924.1 | Science Research Project |

(Capstone unit)

| 300883.1 | Laboratory Quality Management |

(Capstone unit)

| 200045.3 | Quantitative Project |

(Capstone unit)

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300927.2	Molecular Medicine
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
301035.1	Environmental Informatics
200025.2	Discrete Mathematics

Bachelor of Science/Bachelor of International Studies

3660.6

Students should follow the course structure for the course version relevant to the year they commenced. This course version applies to students who commenced study in this course in 2016 or later.

This double degree program is designed for students who want to combine their interest and expertise in science with a sophisticated understanding of international issues and systems. This will equip them to work in globalised science-based professions and industries. In the Science area, students can design their own academic program within the Bachelor of Science course structure, which must include a science Major. This will be combined with a degree in International Studies that examines the relationships of societies, cultures, languages and systems of government within the international system. It develops students' capacity to analyse the historical development of relations among nation states and contemporary political, social and cultural issues, such as globalisation, transnationalism and migration. Students complete a major in International Relations and Asian Studies, and a sub-major in any Asian language, Arabic, Chinese, Indonesian, or Japanese.

Study Mode

Four years full-time or eight years part-time.

Location

Campus	Attendance	Mode
Parramatta Campus	Full Time	Internal

Accreditation

The Bachelor of Science (Chemistry)/Bachelor of International Studies is accredited by The Royal Australian Chemical Institute Incorporated (RACI).

Admission

Local students will normally be admitted through UAC. The following sets of Assumed Knowledge and Recommended Studies apply.

Bachelor of Science

Assumed knowledge: At least two of Biology, Chemistry, Mathematics, Physics

Bachelor of International Studies

Assumed knowledge: Two units of HSC English at Band 4

Recommended studies: HSC English Standard, or equivalent

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 320 credit points as prescribed in the structure below. Students who complete this award will graduate with a Bachelor of Science and a Bachelor of International Studies.

Note: At least 60 credit points must be at Level 3 or above.

Students who wish to exit this double degree after their third year and graduate with a Bachelor of Science must have completed 240 credit points and completed the units as listed below in Years 1, 2 and 3.

Students completing the Bachelor of Science portion of this double degree must complete one of the Science majors listed, in the first three years of study.

The conceptual design of this BSc/BIS double degree is as follows:

Years 1 to 3

Students complete 160 credit points of Bachelor of Science units as listed in the course structure below.

In Years 1 to 4 students complete the four Bachelor of Science/Bachelor of International Studies core units and 12 Bachelor of International Studies units as offered on Parramatta campus only.

International Relations and Asian Studies major and sub-majors are available in the BIS course as follows

- Arabic
- Chinese
- Indonesian
- Japanese

Bachelor of International Studies Units

For details of the relevant International Studies units, refer to the current listing of Bachelor of International Studies, course code 1658 - Bachelor of International Studies. Continuing students should refer to the earlier versions of 1658 -Bachelor of International Studies.

Science Component

Students must study 16 Science units following one of the following programs

- Bachelor of Science (Biological Sciences)
- Bachelor of Science (Chemistry)
- Bachelor of Science (Mathematical Science)
- Bachelor of Science (called 'Science' in the unit set structure below)

Students following the Bachelor of Science program must choose five Level 1 units within the following rules

- At least one mathematics or statistics unit
- Remaining units must cover at least two of the following scientific disciplines: chemistry, biology, physics, computing

Students following the Bachelor of Science (Science) program must also complete at least one of the Science specialisations (majors)

M3090.1	Biochemistry and Molecular Biology
M3080.1	General Biology
M3047.1	Chemistry
M3054.1	Mathematics

And one Level 3 capstone unit.

Consult the handbook entry for the Bachelor of Science degree course for further details about the science majors.

Recommended Sequence

Year 1

Autumn session

Choose two core Arts units from the following

100960.2	Contemporary Society
100846.2	Analytical Reading and Writing
100958.2	Australia and the World

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 192

100968.3　　　Texts and Traditions

Choose two science units appropriate for your science major as follows

Biological Sciences

300802.1　　　Biodiversity

Choose one of

300800.2　　　Essential Chemistry 1
300808.2　　　Introductory Chemistry

Chemistry

300800.2　　　Essential Chemistry 1
300828.1　　　Physics 1

Mathematical Science

300672.2　　　Mathematics 1A
200025.2　　　Discrete Mathematics

Science
Biochemistry and Molecular Biology specialisation

300802.1　　　Biodiversity

Choose one of

300800.2　　　Essential Chemistry 1
300808.2　　　Introductory Chemistry

Chemistry specialisation

300800.2　　　Essential Chemistry 1

And one science unit from the list below
General Biology specialisation

300802.1　　　Biodiversity

And one science unit from the list below
Mathematics specialisation

300672.2　　　Mathematics 1A
200025.2　　　Discrete Mathematics

List of science Units

300802.1　　　Biodiversity
300828.1　　　Physics 1
300800.2　　　Essential Chemistry 1
300808.2　　　Introductory Chemistry

*Students are to select only one Chemistry unit

Spring session
Choose two Core Arts units from the list below

100958.2　　　Australia and the World
100968.3　　　Texts and Traditions
100960.2　　　Contemporary Society
100846.2　　　Analytical Reading and Writing

Choose two science units appropriate for your science major as follows

Biological Sciences

300816.1　　　Cell Biology
300803.1　　　Essential Chemistry 2

Chemistry

300803.1　　　Essential Chemistry 2

Choose one of

300816.1　　　Cell Biology
300818.1　　　Introduction to Physiology
300829.1　　　Physics 2
300831.2　　　Quantitative Thinking

Mathematical Sciences

300673.2　　　Mathematics 1B
200263.5　　　Biometry

Science
Biochemistry and Molecular Biology specialisation

300816.1　　　Cell Biology
300803.1　　　Essential Chemistry 2

Chemistry specialisation

300803.1　　　Essential Chemistry 2

And one science unit from the list below
General Biology specialisation

300816.1　　　Cell Biology

And one science unit from the list below
Mathematics specialisation

300673.2　　　Mathematics 1B

And one science unit from the list below
List of science units

300816.1　　　Cell Biology
300803.1　　　Essential Chemistry 2
300818.1　　　Introduction to Physiology
300829.1　　　Physics 2

Year 2

Autumn session
One compulsory Level 1 BIS major unit
Choose three science units appropriate for your science major as follows

Biological Sciences

300936.1　　　Functional Proteins and Genes
300833.1　　　Microbiology 1
300845.1　　　Genetics

Chemistry

300876.1　　　Organic Chemistry
300832.1　　　Analytical Chemistry

Choose one of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 193

| 300830.2 | Analysis of Change | | 300831.2 | Quantitative Thinking |
| 300672.2 | Mathematics 1A | | 200263.5 | Biometry |

Mathematical Science

200027.2	Linear Algebra
200028.3	Advanced Calculus
301033.1	Introduction to Data Science

Science: non-mathematics specialisations

Biochemistry and Molecular Biology, Chemistry and
General Biology specialisations

Choose at least one Level 1 mathematics unit from the list
below in either semester in second year

Mathematics units

300831.2	Quantitative Thinking
300830.2	Analysis of Change
300672.2	Mathematics 1A
200263.5	Biometry
200025.2	Discrete Mathematics

Choose two science units if completing a mathematics unit
in Autumn, or three science units otherwise

Science units

300936.1	Functional Proteins and Genes
300845.1	Genetics
300865.1	Plant Physiology
300833.1	Microbiology 1
300931.1	Integrated Science
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300930.1	Classical Physics and Advanced Technologies

Science: Mathematics specialisation

| 200027.2 | Linear Algebra |
| 200028.3 | Advanced Calculus |

Choose one of

300802.1	Biodiversity
300828.1	Physics 1
300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

One compulsory Level 1 BIS major unit

Choose three science units appropriate for your science
major as follows

Biological Sciences

| 300817.1 | Molecular Biology |

Choose one of

300848.1	Metabolism
300896.1	Microbiology 2
300847.2	Immunology
300838.1	Comparative Physiology
300839.1	Ecology

Choose one of

Chemistry

| 300899.1 | Inorganic Chemistry |
| 300849.2 | Physical Chemistry |

Choose one of

300838.1	Comparative Physiology
300839.1	Ecology
200030.4	Differential Equations
301032.1	Making Sense of Data

Mathematical Science

| 200030.4 | Differential Equations |
| 301032.1 | Making Sense of Data |

Choose one of

| 300816.1 | Cell Biology |
| 300803.1 | Essential Chemistry 2 |

Science: non-mathematics specialisations

Biochemistry and Molecular Biology, Chemistry and
General Biology specialisations

Choose either one mathematics unit and two science units
or three science units (if mathematics unit completed in
Autumn)

Science units

300848.1	Metabolism
300896.1	Microbiology 2
300847.2	Immunology
300838.1	Comparative Physiology
300817.1	Molecular Biology
300839.1	Ecology
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry

Science: Mathematics specialisation

| 200030.4 | Differential Equations |

Choose two of

301032.1	Making Sense of Data
300838.1	Comparative Physiology
300839.1	Ecology
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry

Year 3

Autumn session

One LOTE (Language other than English) submajor unit

Choose three science units appropriate for your science
major as follows

Biological Sciences

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300919.1	Occupational Health and Safety
300819.1	Topics in Physiology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 194

Capstone units

300851.1	Advanced Physiology
300866.1	Analytical Microbiology
300978.1	Marine and Aquatic Ecology

Chemistry

300907.1	Advanced Inorganic Chemistry
300857.1	Environmental Geochemistry

Choose one of

300926.1	Advanced Physical Chemistry
300912.1	Molecular Pharmacokinetics

Mathematical Science

200193.2	Abstract Algebra
200023.3	Analysis
301034.1	Predictive Modelling

Science

Choose three of

300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300857.1	Environmental Geochemistry
300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
200193.2	Abstract Algebra
200023.3	Analysis
301034.1	Predictive Modelling

Capstone units

300851.1	Advanced Physiology
300866.1	Analytical Microbiology
300978.1	Marine and Aquatic Ecology

Spring session

One LOTE (Language other than English) submajor unit

Choose three science units appropriate for your science major as follows

Biological Sciences

300905.1	Advanced Immunology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology

Capstone units

300927.2	Molecular Medicine
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change
300924.1	Science Research Project
300883.1	Laboratory Quality Management

Chemistry

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry

Choose one capstone unit

300924.1	Science Research Project

300883.1	Laboratory Quality Management

Mathematical Science

200022.3	Mathematical Modelling
301035.1	Environmental Informatics

Capstone unit

200045.3	Quantitative Project

Science

Choose three of

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300923.1	Quantum Physics
200022.3	Mathematical Modelling
301035.1	Environmental Informatics

Capstone units

300927.2	Molecular Medicine
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change
300924.1	Science Research Project
300883.1	Laboratory Quality Management
200045.3	Quantitative Project

Year 4

Autumn session

Four BIS units – 3 x BIS major units and 1 x LOTE submajor unit.

Students might otherwise exercise the option to undertake study abroad this semester.

Spring session

Four BIS units – 3 x BIS major units and 1 x LOTE submajor unit

Bachelor of Sustainable Agriculture and Food Security

3726.1

Opportunities are rapidly emerging for entrepreneurs to lead a new food future. Immersed in an approach that integrates social, economic and environmental values, students will view plant and animal production from consumer contexts to explore personal and community perceptions about food sustainability. This innovative degree merges topics of agriculture, food and health to empower students to design solutions for international development, community education and the urban–rural interface. Throughout study, engagement with industry and community will inspire students to take action towards a more sustainable food future. The course includes disciplines of natural science, social science and business studies.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 195

Study Mode

Three years full-time or six years part-time

Location

Campus	Attendance	Mode
Hawkesbury Campus	Full Time	Internal

Admission

Assumed Knowledge: One or more units of Agriculture, Business Studies, Geography, Society and Culture, and any two units of Mathematics and any two units of Science.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office.

International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Course Structure

Qualification for this award requires the successful completion of 240 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Students may choose to major in Natural Science, Social Sciences or Business, or may choose a general pathway.

M4004 - Natural Science Major

Year 1

Autumn session

300804.1	Feeding the Planet
300811.1	Scientific Literacy
200855.1	Leadership in a Complex World
301071.1	Introduction to Critical Thinking

Spring session

101925.1	Mediated Mobilities
301096.1	Horticultural Production Systems
300805.1	Food Science 1

Introduction to Ecological Agriculture (AGR141) - in partnership with Charles Sturt University

Year 2

Autumn session

301097.1	Greenhouse Technology for Food Sustainability
300840.1	Environmental Planning and Climate Change
300823.1	Soils

Choose one of

300808.2	Introductory Chemistry
300800.2	Essential Chemistry 1

Spring session

300791.1	Sustainable Food Production
300790.1	Agriculture, Food and Health
300932.1	Natural Science Research Methods
300816.1	Cell Biology

Year 3

1H/Autumn session

300913.1	Field Project 1
301098.1	Analysis of Agricultural Supply and Demand
300921.1	Plant Health and Biosecurity

Choose one of

300865.1	Plant Physiology
300845.1	Genetics

2H/Spring session

300914.1	Field Project 2
300870.1	Water in the Landscape
300869.1	Postharvest

Complex Systems in Biological Farming (ARG306) - in partnership with Charles Sturt University

M4005 - Social Sciences Major

Year 1

Autumn session

300804.1	Feeding the Planet
300811.1	Scientific Literacy
200855.1	Leadership in a Complex World
301071.1	Introduction to Critical Thinking

Spring session

101925.1	Mediated Mobilities
301096.1	Horticultural Production Systems
300805.1	Food Science 1

Introduction to Ecological Agriculture (AGR141) - in partnership with Charles Sturt University

Year 2

Autumn session

301097.1	Greenhouse Technology for Food Sustainability
300840.1	Environmental Planning and Climate Change

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 196

101331.2   Issues in World Development: Rich World, Poor World

Communication Project Management (COM 343) - in partnership with Charles Sturt University

Spring session

300791.1   Sustainable Food Production
300790.1   Agriculture, Food and Health
300932.1   Natural Science Research Methods
102212.1   Internship and Community Engagement

Year 3

1H/Autumn session

300913.1   Field Project 1
301098.1   Analysis of Agricultural Supply and Demand
101569.2   Sustainable Futures
101593.3   Planning the City: Development, Community and Systems

2H/Spring session

300914.1   Field Project 2
300961.2   Social Computing
101595.2   Community and Social Action
101591.2   The Economics of Cities and Regions

M4006 - Business Major

Year 1

Autumn session

300804.1   Feeding the Planet
300811.1   Scientific Literacy
200855.1   Leadership in a Complex World
301071.1   Introduction to Critical Thinking

Spring session

101925.1   Mediated Mobilities
301096.1   Horticultural Production Systems
300805.1   Food Science 1

Introduction to Ecological Agriculture (AGR141) - in partnership with Charles Sturt University

Year 2

Autumn session

301097.1   Greenhouse Technology for Food Sustainability
300840.1   Environmental Planning and Climate Change
200083.2   Marketing Principles
200525.3   Principles of Economics

Spring session

300791.1   Sustainable Food Production
300790.1   Agriculture, Food and Health
300932.1   Natural Science Research Methods
200084.2   Consumer Behaviour

Year 3

1H/Autumn session

300913.1   Field Project 1
301098.1   Analysis of Agricultural Supply and Demand
200862.1   Creating Change and Innovation
200088.3   Brand and Product Management

2H/Spring session

300914.1   Field Project 2
200815.2   Globalisation and Sustainability
200158.4   Business, Society and Policy

Choose one of

200094.4   International Marketing
200087.3   Strategic Marketing Management
200086.3   Marketing Communications

General Pathway

Year 1

Autumn session

300804.1   Feeding the Planet
300811.1   Scientific Literacy
200855.1   Leadership in a Complex World
301071.1   Introduction to Critical Thinking

Spring session

101925.1   Mediated Mobilities
301096.1   Horticultural Production Systems
300805.1   Food Science 1

Introduction to Ecological Agriculture (AGR141) - in partnership with Charles Sturt University

Year 2

Autumn session

301097.1   Greenhouse Technology for Food Sustainability
300840.1   Environmental Planning and Climate Change

Choose one of

300823.1   Soils
101331.2   Issues in World Development: Rich World, Poor World
200083.2   Marketing Principles

And one elective

Spring session

300791.1   Sustainable Food Production
300790.1   Agriculture, Food and Health
300932.1   Natural Science Research Methods

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 197

Year 3

1H/Autumn session

300913.1	Field Project 1
301098.1	Analysis of Agricultural Supply and Demand

Choose one of

300921.1	Plant Health and Biosecurity
101569.2	Sustainable Futures
200862.1	Creating Change and Innovation

And one elective

2H/Spring session

300914.1	Field Project 2

Choose two of

300869.1	Postharvest
300961.2	Social Computing
200815.2	Globalisation and Sustainability
300870.1	Water in the Landscape
101595.2	Community and Social Action
200158.4	Business, Society and Policy

And one elective

Bachelor of Traditional Chinese Medicine

4710.1

This course prepares graduates for careers as practitioners of Traditional Chinese Medicine. Traditional Chinese medicine practitioners are usually either self-employed in private practice or work as a member of a team in a clinic that offers a range of therapies. They practice as acupuncturists and treating clients using Chinese herbal medications. There are also opportunities in medical research, product development, management and sales roles in pharmaceutical and herbal companies.

The course in Traditional Chinese Medicine is offered as a 4-year Bachelor of Traditional Chinese Medicine. The first three years of the program combine studies in traditional Chinese medicine, acupuncture and Chinese herbal medicine with a broad understanding of biomedicine and various health science fields to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. The final year focuses predominately on practical experience and specialised areas. Part of the clinical experience can be taken through an intensive clinical placement in China. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program.

Study Mode
Four years full-time

Location

Campus	Attendance	Mode
Campbelltown Campus	Full Time	Internal

Accreditation
Accreditation for this course is currently being sought

Admission
Assumed knowledge: any 2 units of English.

Recommended studies: Biology

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC).

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

International applicants must apply directly to Western Sydney University via the International Office. International students applying to The University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

Special Requirements
In order to enrol in Second Year Autumn units, all students must have: National Police Certificate and a Working with Children Check Student Declaration. In order to enrol in Second Year Spring units, all students must have a First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake clinical placements in public hospitals, students must comply with vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. NSW Health can provide details of necessary vaccinations. To meet NSW health requirements for clinical placements, second year students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. To be eligible to undertake field/work/ practice placements, students must also comply with the NSW Health Records and Information Privacy Act (2004) and complete a relevant declaration.

Course Structure
Qualification for this award requires the successful completion of 320 credit points which include the units listed in the recommended sequence below.

Recommended Sequence

Year 1

Autumn session

400346.2	Traditional Chinese Medicine 1
400868.3	Human Anatomy and Physiology 1
400866.3	Culture, Diversity and Health
400871.2	Professional Health Competencies

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 198

Spring session

400348.2	Traditional Chinese Medicine 2
400869.3	Human Anatomy and Physiology 2
400732.2	Communication in Health
300816.1	Cell Biology

Year 2

Autumn session

400352.2	Traditional Chinese Medicine 3
400138.3	Pathophysiology 1
400874.3	Channels and Points 1
400876.2	Chinese Materia Medica 1

Spring session

400863.2	Foundations of Research and Evidence-Based Practice
400267.3	Pathophysiology 2
400875.2	Channels and Points 2
400877.2	Chinese Materia Medica 2

Year 3

Autumn session

400864.3	Research Methods (Quantitative and Qualitative)
400878.2	Chinese Medicinal Formulas
400354.2	Traditional Chinese Medicine Practice 1
400873.1	Acupuncture Techniques

Spring session

400981.2	Clinical Pharmacology
400879.1	Clinical Assessment Methods
400865.3	Evidence-Based Practice
400356.2	Traditional Chinese Medicine Practice 2

At this point, students may exit with the Bachelor of Health Science

Year 4

Autumn session

401098.1	Chinese Internal Medicine 1
401099.1	Specialities in Traditional Chinese Medicine 1
401100.1	Classical Texts in Chinese Medicine
401101.1	Traditional Chinese Medicine Practice 3

Spring session

401102.1	Chinese Internal Medicine 2
401103.1	Specialities in Traditional Chinese Medicine 2
401104.1	Block Clinical Practicum
401105.1	Traditional Chinese Medicine Practice 4

Bachelor of Health Science (Health and Physical Education) (WSTC First Year Program)

7089.1

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide students with the first year units included in the Bachelor of Health Science (Health and Physical Education) course. It presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Diploma in Health Science (Health and Physical Education) will articulate into the Bachelor of Health Science (Health and Physical Education) degree at Western Sydney University with up to one year (80 credit points) equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode

One year full-time (three terms), two years part-time (six terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Inherent requirements

The inherent requirements of the Bachelor of Health Science (Health and Physical Education) will apply to this Diploma.

Admission

This course is not available to International students.

International students may enrol in 7088 Diploma in Health Science (HPE)

The aim of the course is to prepare students for tertiary study in health science. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 199

- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied.

Met other entry requirements such as

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Course Structure

Students must pass the following University level units, which will allow students to enter the second year of the Bachelor of Health Science (PDHPE) course at Western Sydney University with 80 credit points of advanced standing.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700073.2	Fundamentals of Exercise Science (WSTC)

Students must also pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program

700056.3	Academic English (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

Students must also pass the following non-award unit which does not count for credit towards the Diploma.

700170.2	Tertiary Study Skills in Health Science (WSTC Prep)

Bachelor of Health Science (HPE) Extended (WSTC First Year Program)

7091.1

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide students with the first year units included in the Bachelor of Health Science (Health and Physical Education) course. It presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course and aims to produce students who are fully prepared for study beyond the first year of the B Health Science degree. The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

Students who successfully complete the Diploma in Health Science (Health and Physical Education) Extended may articulate into the B Health Science (Health and Physical Education) degree at Western Sydney University with up to one year (80 CPs) equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode

One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission

This course is not available to International students.

International students may enrol in 7090 Diploma in Health Science (Health and Physical Education) Extended

Local Recent School Leavers

Completion of Year 12 with specified ATAR to be determined year by year.

Non-Credentialed Students

Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure

Students are categorised into two Pathways. See individual links below for detailed course structure.

Local Recent School Leaver

A7015.1	WSTC Health Science (HPE) Extended Local Recent School Leavers

Non-credential Applicants

A7017.1	WSTC Health Science (HPE) Extended Non-Credentialed Applicants

Bachelor of Health Science (WSTC First Year Program)

7028.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2015 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 200

to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Bachelor of Health Science (WSTC First Year Program) is designed to provide students with the first year units included in the Bachelor of Health Science degree and presents students with units covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course. This course aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree in the specified key programs of Health Promotion, Health Services Management and Therapeutic Recreation. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Bachelor of Health Science (WSTC First Year Program) will articulate into the B Health Science degree at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One year full-time (three terms)

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission
The aim of the course is to prepare students for tertiary study in Health Science areas of Health Promotion, Health Services Management and Therapeutic Recreation. This course is accredited by the University, as principal, to enable its agent, Western Sydney University, The College, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Course Structure
Successful completion of the following units will allow students to enter the second year of the Bachelor of Health Science (with key programs in Health Promotion, Health Services Management, or Therapeutic Recreation) at Western Sydney University with 80 credit points of advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700075.2	Professional Pathways in Health Science (WSTC)

Students must pass the following preparatory level units for which no advanced standing will be granted in the Western Sydney University degree program

700056.3	Academic English (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

Students must also pass with a Satisfactory grade the following non-award unit, which does not count for credit towards the Diploma

700170.2	Tertiary Study Skills in Health Science (WSTC Prep)

Bachelor of Health Science Extended (WSTC First Year Program)

7078.1

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2015 or later.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide students with the first year units included in the Bachelor of Health Science course. It presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree. The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

Students who successfully complete the Bachelor of Health Science Extended (WSTC First Year Program) will articulate into the Bachelor of Health Science degree at Western Sydney University with up to one year (80 credit points) equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 201

Study Mode

One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission

Recent School Leavers:

Completion of Year 12 with specified ATAR to be determined year by year.

Non-Credentialed Students:

Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure

Students are categorised into two Pathways. See individual links below for detailed course structure.

Local Recent School Leaver

A7012.1	WSTC Health Science Extended Local Recent School Leaver

Non-credential Applicants

A7014.1	WSTC Health Science Extended Non-Credentialed Applicants

Bachelor of Health Science Fast Track (WSTC First Year Program)

7093.1

This course is delivered by Western Sydney University, The College as an agent off Western Sydney University.

This program is designed to provide students with the first year units included in the Bachelor of Health Science course. It presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course and aims to produce students who are fully prepared for study beyond the first year of the B Health Science degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Bachelor of Health Science Fast Track (WSTC First Year Program) will articulate into the B Health Science degree at Western Sydney University with up to one year (80 CPs) equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode

Eight months full-time (two terms) or four terms part-time

Admission

The aim of the course is to prepare students for tertiary study in Arts. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied.

Met other entry requirements such as

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

This course is not available to International students.

Course Structure

Successful completion of the units listed below will allow students to enter the second year of the Bachelor of Health Science (with key programs in Health Promotion, Health Services Management, or Therapeutic Recreation) at Western Sydney University with 80 credit points of advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700075.2	Professional Pathways in Health Science (WSTC)

Students must also pass, with a Satisfactory grade, the following non-award unit. This unit does not count for credit towards the Diploma.

700170.2	Tertiary Study Skills in Health Science (WSTC Prep)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 202

Bachelor of Science (WSTC First Year Program)

7085.1

This course is designed to engage students in, and further prepare students for, tertiary study in science. It presents students with first year level Bachelor of Science units and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Science degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Diploma in Science will articulate into Bachelor of Science or Bachelor of Medical Science or Bachelor of Natural Science at Western Sydney University with up to one year equivalent of advanced standing.

Study Mode

One year full-time (three terms) or two years part-time (six terms)

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission

This course is not available to International students

International students may enrol in 7084 Diploma in Science

The aim of the course is to prepare students for tertiary study in Science. The Bachelor WSTC First Year Program is accredited by the University, as principal, to enable its agent, Western Sydney University, The College, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

• Completed an English unit in the NSW Higher School Certificate, OR

• Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR

• Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR

• Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Met other entry requirements such as:

• An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Science) OR

• Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Special Requirements

All students must complete Tertiary Study Skills with Western Sydney University, The College prior to completion of the program.

Course Structure

Students must pass the following units

700095.2	Biodiversity (WSTC)
700125.2	Cell Biology (WSTC)
700122.2	Essential Chemistry 2 (WSTC)
700124.2	Scientific Literacy (WSTC)
700123.2	Quantitative Thinking (WSTC)

Students must pass one of the following two units

700121.3	Essential Chemistry 1 (WSTC)
700155.2	Introductory Chemistry (WSTC)

Students must pass two of the following four units (dependent upon which Western Sydney University degree they wish to enter upon successful completion of their studies ie Bachelor of Science, Bachelor of Natural Science or Bachelor of Medical Science)

700099.2	Resource Sustainability (WSTC)
700096.3	Integrated Science (WSTC)
700097.2	Introduction to Anatomy (WSTC)
700098.2	Introduction to Physiology (WSTC)

Students must complete the following Foundation level unit for which no advanced standing will be granted in the Western Sydney University degree program

700043.3	Chemistry (WSTC Prep)

Students must also pass the following non-award unit

700173.2	Tertiary Study Skills in Science (WSTC Prep)

This unit does not count for credit towards the Diploma.

Bachelor of Science Extended (WSTC First Year Program)

7087.1

This course is designed to engage students in, and further prepare students for, tertiary study in science. It presents students with first year level Bachelor of Science units and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Science degree. Students who successfully complete the Diploma in Science will articulate into Bachelor of Science or Bachelor of Medical Science or Bachelor of Natural Science at Western Sydney University with up to one year equivalent of advanced standing (80 Credit Points). The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

Study Mode

One and a half years full-time (four terms) or three years part-time (eight terms).

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 203

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission

This course is not available to International students.

International students may enrol in 7086 Diploma in Science Extended

Local Recent School Leavers

Completion of Year 12 with specified ATAR to be determined year by year.

Non-Credentialed Students

Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure

Students are categorised into two Pathways. See individual links below for detailed course structure.

Local Recent School Leaver

A7042.1	WSTC Science Extended Local Recent School Leavers

Non-Credentialed Applicants

A7044.1	WSTC Science Extended Non-Credentialed Applicants

Bachelor of Science Fast Track (WSTC First Year Program)

7092.1

This course is designed to engage students in, and further prepare students for, tertiary study in science. It presents students with first year level B Science units and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Science degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Bachelor of Science Fast Track (WSTC First Year Program) will articulate into B Science or B Medical Science or B Natural Science at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode

Eight months full-time (two terms)

Admission

The aim of the course is to prepare students for tertiary study in Science. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- ○ Completed an English unit in the NSW Higher School Certificate, OR
- ○ Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- ○ Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- ○ Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Met other entry requirements such as

- ○ An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Science) OR
- ○ Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

This course is not available to International students.

International students entering the Diploma must satisfy one of the following language requirements

- ○ IELTS 6.0 with a minimum 5.5 in each sub band OR
- ○ Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR
- ○ Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- ○ Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Academic Entry Requirements vary according to country of origin. However, in general

- ○ Completion of Year 12 or its equivalent is the minimum entry requirement OR
- ○ Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher

Special Requirements

All students must complete Tertiary Study Skills with Western Sydney University, The College prior to completion of the diploma.

Course Structure

Students must pass the following units

700095.2	Biodiversity (WSTC)
700125.2	Cell Biology (WSTC)
700122.2	Essential Chemistry 2 (WSTC)
700124.2	Scientific Literacy (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 204

700123.2   Quantitative Thinking (WSTC)

Students must also pass one of the following two units

700121.3   Essential Chemistry 1 (WSTC)
700155.2   Introductory Chemistry (WSTC)

Students must pass two of the following four units (dependent upon which Western Sydney University degree they wish to enter upon successful completion of their studies ie Bachelor of Science, Bachelor of Natural Science or Bachelor of Medical Science)

700099.2   Resource Sustainability (WSTC)
700096.3   Integrated Science (WSTC)
700097.2   Introduction to Anatomy (WSTC)
700098.2   Introduction to Physiology (WSTC)

Students must also pass the following non-award unit. This unit does not count as credit towards the Diploma.

700173.2   Tertiary Study Skills in Science (WSTC Prep)

Diploma in Health Science

7018.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2015 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

For more information on Western Sydney University, The College, please refer to their web site

The Diploma in Health Science is designed to provide students with the first year units included in the Bachelor of Health Science course. The Diploma presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course. Transition to tertiary study is assisted by the inclusion of Foundation level Academic English and Science. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree in the specified key programs of Health Promotion, Health Services Management and Therapeutic Recreation. This course, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment

Study Mode
One year full-time (three terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Health Science areas of Health Promotion, Health Services Management and Therapeutic Recreation. The Diploma will be accredited by the University, as principal, to enable its agent, Western Sydney University, The College, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science) OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

English Entry Requirements. International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the EAP III course, offered by Western Sydney University, The College, with a 50% pass OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Course Structure

Successful completion of the following units will allow students to enter the second year of the Bachelor of Health Science (with key programs in Health Promotion, Health Services Management, or Therapeutic Recreation) at

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 205

Western Sydney University with 80 credit points of advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700075.2	Professional Pathways in Health Science (WSTC)

Students must pass the following preparatory level units for which no advanced standing will be granted in the Western Sydney University degree program

700056.3	Academic English (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

Students must also pass the following non-award unit. This unit does not count for credit towards the Diploma.

700170.2	Tertiary Study Skills in Health Science (WSTC Prep)

Diploma in Health Science (Health and Physical Education)

7088.1

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide students with the first year units included in the Bachelor of Health Science (Health and Physical Education) course. It presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Diploma in Health Science (Health and Physical Education) will articulate into the Bachelor of Health Science (Health and Physical Education) degree at Western Sydney University with up to one year (80 CPs) equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One year full-time (three terms), two years part-time (six terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Part Time	Internal

Inherent requirements
The inherent requirements of the Bachelor of Health Science (Health and Physical Education) will apply to this Diploma.

Admission
The aim of the course is to prepare students for tertiary study in health science. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local Students
Local students entering this Diploma are required to have

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied.

Met other entry requirements such as

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science), OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher

International Students
International students entering the Diploma must satisfy one of the following language requirements

- IELTS 6.0 with a minimum 5.5 in each sub band OR
- Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied.

Academic Entry Requirements vary according to country of origin. However, in general

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 206

Course Structure

Students must pass the following University level units, which will allow students to enter the second year of the Bachelor of Health Science (PDHPE) course at Western Sydney University with 80 credit points of advanced standing.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700073.2	Fundamentals of Exercise Science (WSTC)

Students must also pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

700056.3	Academic English (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

Students must also pass the following non-award unit which does not count for credit towards the Diploma.

700170.2	Tertiary Study Skills in Health Science (WSTC Prep)

Diploma in Health Science (Health and Physical Education) Extended

7090.1

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide students with the first year units included in the Bachelor of Health Science (Health and Physical Education) course. It presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree. The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

Students who successfully complete the Diploma in Health Science (Health and Physical Education) Extended may articulate into the Bachelor of Health Science (Health and Physical Education) degree at Western Sydney University with up to one year (80 credit points) equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode

One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Inherent requirements

The inherent requirements of the Bachelor of Health Sceince (Health and Physical Education will apply to this Diploma.

Admission

Local Recent School Leavers

Completion of Year 12 with specified ATAR to be determined year by year.

International Students

IELTS 6.0 with minimum 5.0 in each sub band; or equivalent results from either the English Language Program or English Entrance Test administered by Western Sydney University, The College.and completion of year 11 or equivalent with specified results.

Non-Credentialed Students

Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure

Students are categorised into three Pathways. See individual links below for detailed course structure.

Local Recent School Leavers

A7015.1	WSTC Health Science (HPE) Extended Local Recent School Leavers

International Students

A7016.1	WSTC Health Science (HPE) Extended International Students

Non-credential Applicants

A7017.1	WSTC Health Science (HPE) Extended Non-Credentialed Applicants

Diploma in Health Science Extended

7068.1

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

This program is designed to provide students with the first year units included in the Bachelor of Health Science course. It presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course and aims to

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 207

produce students who are fully prepared for study beyond the first year of the B Health Science degree. The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

Students who successfully complete the Diploma in Health Science Extended will articulate into the Bachelor of Health Science degree at Western Sydney University with up to one year (80 credit points) equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission

Recent School Leavers:

Completion of Year 12 with specified ATAR to be determined year by year.

International Students:

IELTS 6.0 with minimum 5.0 in each sub band; or equivalent results from either the English Language Program or English Entrance Test administered by Western Sydney University, The College.and completion of year 11 or equivalent with specified results.

Non-Credentialed Students:

Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure

Students are categorised into three Pathways. See individual links below for detailed course structure.

Local Recent School Leaver

A7012.1   WSTC Health Science Extended Local Recent School Leaver

International Students

A7013.1   WSTC Health Science Extended International Students

Non-credentialed Applicants

A7014.1   WSTC Health Science Extended Non-Credentialed Applicants

Diploma in Health Science Fast Track

7019.3

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year for this course is 2014 or later.

Units may be revised or replaced to ensure students are provided with up to date curriculum throughout their studies, and this may result in a new course version. Refer to the Check My Course Progress page in MySR for the most up to date information for your course.

This course is delivered by Western Sydney University, The College as an agent of Western Sydney University.

The Diploma in Health Science Fast Track is designed to provide students with the first year units included in the Bachelor of Health Science course. The Diploma presents students with subjects covering introductory Science, Communication and Health aspects of the Bachelor of Health Science course. The Diploma aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Health Science degree in the specified key programs of Health Promotion, Health Services Management and Therapeutic Recreation. This course, completed in a smaller, more supportive learning environment than usually found in first year undergraduate programs, is designed to develop students to have greater ability in self-directed study and have the self esteem that comes from prior achievement in a tertiary environment.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
Eight months full-time (two terms)

Admission

The aim of the course is to prepare students for tertiary study in Health Science areas of Health Promotion, Health Services Management and Therapeutic Recreation. The Diploma will be accredited by the University, as principal, to enable its agent, Western Sydney University, The College, to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, OR
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Health Science) OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

English Entry Requirements. International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 208

- Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

Course Structure

Successful completion of the units listed below will allow students to enter the second year of the Bachelor of Health Science (with key programs in Health Promotion, Health Services Management, or Therapeutic Recreation) at Western Sydney University with 80 credit points of advanced standing.

Qualification for this award requires the successful completion of the units listed below.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700075.2	Professional Pathways in Health Science (WSTC)

Students must also pass the following non-award unit. This unit does not count for credit towards the Diploma.

| 700170.2 | Tertiary Study Skills in Health Science (WSTC Prep) |

Diploma in Science

7084.1

This course is designed to engage students in, and further prepare students for, tertiary study in science. It presents students with first year level Bachelor of Science units and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Science degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Diploma in Science will articulate into the Bachelor of Science or Bachelor of Medical Science or Bachelor of Natural Science at Western Sydney University with up to one year equivalent of advanced standing.

Study Mode

One year full-time (three terms) or two years part-time (six terms)

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission

The aim of the course is to prepare students for tertiary study in Science. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students are required to have:

• Completed an English unit in the NSW Higher School Certificate, OR

• Competency in English at IELTS 6.0 equivalent (unless a native speaker) OR

• Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR

• Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Met other entry requirements such as:

• An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Science) OR

• Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

International students

International students must satisfy one of the following language requirements:

• IELTS 6.0 with a minimum 5.5 in each sub band OR

• Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass OR

• Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent OR

• Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher for which advanced standing can be applied for.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Academic Entry Requirements vary according to country of origin. However, in general:

• Completion of Year 12 or its equivalent is the minimum entry requirement OR

• Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 5.5 or higher.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 209

Special Requirements

All students must complete Tertiary Study Skills with Western Sydney University, The College prior to completion of the Diploma.

Course Structure

Students must pass the following units

700095.2	Biodiversity (WSTC)
700125.2	Cell Biology (WSTC)
700122.2	Essential Chemistry 2 (WSTC)
700124.2	Scientific Literacy (WSTC)
700123.2	Quantitative Thinking (WSTC)

Students must pass one of the following two units

700121.3	Essential Chemistry 1 (WSTC)
700155.2	Introductory Chemistry (WSTC)

Students must pass two of the following four units (dependent upon which Western Sydney University degree they wish to enter upon successful completion of their studies ie Bachelor of Science, Bachelor of Natural Science or Bachelor of Medical Science)

700099.2	Resource Sustainability (WSTC)
700096.3	Integrated Science (WSTC)
700097.2	Introduction to Anatomy (WSTC)
700098.2	Introduction to Physiology (WSTC)

Students must complete the following Foundation level unit for which no advanced standing will be granted in the Western Sydney University degree program

700043.3	Chemistry (WSTC Prep)

Students must also pass the following non-award unit

700173.2	Tertiary Study Skills in Science (WSTC Prep)

This unit does not count for credit towards the Diploma.

Diploma in Science Extended

7086.1

This course is designed to engage students in, and further prepare students for, tertiary study in science. It presents students with first year level Bachelor of Science units and aims to produce students who are fully prepared for study beyond the first year of the Bachelor of Science degree. Students who successfully complete the Diploma in Science will articulate into Bachelor of Science or Bachelor of Medical Science or Bachelor of Natural Science at Western Sydney University with up to one year equivalent of advanced standing (80 Credit Points). The inclusion of additional preparatory units is designed to assist students in the transition to study at University level.

Study Mode

One and a half years full-time (four terms) or three years part-time (eight terms).

Location

Campus	Attendance	Mode
The College - Nirimba Education Precinct	Full Time	Internal
The College - Nirimba Education Precinct	Part Time	Internal

Admission

Local Recent School Leavers

Completion of Year 12 with specified ATAR to be determined year by year.

International Students

IELTS 5.5 with minimum 5.0 in each sub band; or equivalent results from either the English Language Program or English Entrance Test administered by Western Sydney University, The College.and completion of year 11 or equivalent with specified results.

Non-Credentialed Students

Australian Citizens and Permanent Residents either aged 18 years or over or completed Year 11 equivalent.

Course Structure

Students are categorised into three Pathways. See individual links below for detailed course structure.

Local Recent School Leaver

A7042.1	WSTC Science Extended Local Recent School Leavers

International Students

A7043.1	WSTC Science Extended International Students

Non-credentialed Applicants

A7044.1	WSTC Science Extended Non-Credentialed Applicants

Diploma in Science Fast Track

7009.4

Students should follow the course structure for the course version relevant to the year they commenced. This version applies to students whose commencement year in this course is 2014 or later.

This course is designed to engage students in, and further prepare students for, tertiary study in science. It presents students with first year level Bachelor of Science units and aims to produce students who are fully prepared for study beyond the first year of the B Science degree. It is delivered in a smaller, more supportive learning environment than usually found in first year undergraduate programs. Students who successfully complete the Diploma in Science Fast Track will articulate into Bachelor of Science or Bachelor of Medical Science or Bachelor of Natural

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 210

Science at Western Sydney University with up to one year equivalent of advanced standing.

For more information on Western Sydney University, The College, please refer to their web site.

Study Mode
Eight months full-time (two terms)

Admission
The aim of the course is to prepare students for tertiary study in Science. The Diploma is accredited by the University, as principal, to enable its agent, Western Sydney University, The College to produce students who are fully prepared for study beyond the first year of a tertiary award.

Local students entering this Diploma are required to have:

- Completed an English unit in the NSW Higher School Certificate, Or
- Competency in English at IELTS 6.0 equivalent (unless a native speaker) Or
- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent Or
- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place (the ATAR will be set each year at a level below that for admission for the Bachelor of Science) OR
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

International students entering the Diploma must satisfy one of the following language requirements:

- IELTS 6.0 with a minimum 5.5 in each sub band OR

- Completed the EAP 4 course offered by Western Sydney University, The College with a 50% pass Or

- Passed the English test administered by Western Sydney University, The College at IELTS 6.0 equivalent Or

- Passed the Foundation Studies Academic English unit, offered by Western Sydney University, The College at C grade level or higher.

Students are also assumed to have completed some study in Mathematics and Science at senior high school level or its equivalent.

Academic Entry Requirements vary according to country of origin. However, in general:

- Completion of Year 12 or its equivalent is the minimum entry requirement Or
- Completed the Foundation Studies course offered by Western Sydney University, The College, with a Grade Point Average of 6.0 or higher.

Special Requirements
All students must complete Tertiary Study Skills with Western Sydney University, The College prior to completion of the diploma.

Course Structure
Students must pass the following units

700095.2	Biodiversity (WSTC)
700125.2	Cell Biology (WSTC)
700122.2	Essential Chemistry 2 (WSTC)
700124.2	Scientific Literacy (WSTC)
700123.2	Quantitative Thinking (WSTC)

Students must also pass one of the following two units

700121.3	Essential Chemistry 1 (WSTC)
700155.2	Introductory Chemistry (WSTC)

Students must pass two of the following four units (dependent upon which Western Sydney University degree they wish to enter upon successful completion of their studies ie Bachelor of Science, Bachelor of Natural Science or Bachelor of Medical Science)

700099.2	Resource Sustainability (WSTC)
700096.3	Integrated Science (WSTC)
700097.2	Introduction to Anatomy (WSTC)
700098.2	Introduction to Physiology (WSTC)

Students must also pass the following non-award unit. This unit does not count as credit towards the Diploma.

700173.2	Tertiary Study Skills in Science (WSTC Prep)

SCHOOL OF SCIENCE AND HEALTH

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 211

Specialisations

UWSCollege Admission Pathway - WSTC Health Science Extended Local Recent School Leaver

A7012.1

Location

Campus	Mode
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Note that students must be enrolled in 7068 Diploma in Health Science Extended or 7078 Bachelor of Health Science Extended (WSTC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700198.2	Academic Communication 1 (WSTC Prep)
700225.2	Academic Skills for Health Science (WSTC Prep)
700226.2	Health Care Environments (WSTC Prep)
700227.2	Literacy in Health Science (WSTC Prep)
700199.2	Academic Communication 2 (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

University level Units

Students must pass the following University level units, which will allow students to enter the second year of the Bachelor of Health Science course at Western Sydney University with 80 credit points advanced standing.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700075.2	Professional Pathways in Health Science (WSTC)

UWSCollege Admission Pathway - WSTC Health Science Extended International Students

A7013.1

Location

Campus	Mode
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7068 Diploma in Health Science Extended to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700207.2	English for Tertiary Study 1 (WSTC Prep)
700225.2	Academic Skills for Health Science (WSTC Prep)
700226.2	Health Care Environments (WSTC Prep)
700227.2	Literacy in Health Science (WSTC Prep)
700208.2	English for Tertiary Study 2 (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

University level Units

Students must pass the following University level units, which will allow students to enter the second year of the Bachelor of Health Science course at Western Sydney University with 80 credit points advanced standing.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700075.2	Professional Pathways in Health Science (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 212

UWSCollege Admission Pathway - WSTC Health Science Extended Non-Credentialed Applicants

A7014.1

Location

Campus	Mode
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7068 Diploma in Health Science Extended or 7078 Bachelor of Health Science Extended (WSTC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700209.2	Introduction to Academic Communication 1 (WSTC Prep)
700225.2	Academic Skills for Health Science (WSTC Prep)
700226.2	Health Care Environments (WSTC Prep)
700227.2	Literacy in Health Science (WSTC Prep)
700210.2	Introduction to Academic Communication 2 (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

University level Units

Students must pass the following University level units, which will allow students to enter the second year of the Bachelor of Health Science course at Western Sydney University with 80 credit points advanced standing.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700075.2	Professional Pathways in Health Science (WSTC)

UWSCollege Admission Pathway - WSTC Health Science (HPE) Extended Local Recent School Leavers

A7015.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

This course will be available at Bankstown campus from 2016 for courses 7090 and 7091.

Students must be enrolled in 7069 Diploma in Health Science (Personal Development, Health and Physical Education Pathway) Extended, 7079 Bachelor of Health Science (PDHPEP) Extended (WSTC First Year Program), 7090 Diploma in Health Science (Health and Physical Education) Extended or 7091 Bachelor of Health Science (Health and Physical Education) Extended (WSTC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700198.2	Academic Communication 1 (WSTC Prep)
700225.2	Academic Skills for Health Science (WSTC Prep)
700226.2	Health Care Environments (WSTC Prep)
700227.2	Literacy in Health Science (WSTC Prep)
700199.2	Academic Communication 2 (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

University level Units

Students must pass the following University level units, which will allow students to enter the second year of the Bachelor of Health Science (PDHPE) course at Western Sydney University with 80 credit points advanced standing.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 213

700073.2   Fundamentals of Exercise Science (WSTC)

UWSCollege Admission Pathway - WSTC Health Science (HPE) Extended International Students

A7016.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

This course will be available at Bankstown campus from 2016 for courses 7090 and 7091.

Students must be enrolled in 7069 Diploma in Health Science (Personal Development, Health and Physical Education Pathway) Extended or 7090 Diploma in Health Science (Health and Physical Education) Extended to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700207.2	English for Tertiary Study 1 (WSTC Prep)
700225.2	Academic Skills for Health Science (WSTC Prep)
700226.2	Health Care Environments (WSTC Prep)
700227.2	Literacy in Health Science (WSTC Prep)
700208.2	English for Tertiary Study 2 (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

University level Units

Students must pass the following University level units, which will allow students to enter the second year of the Bachelor of Health Science (PDHPE) course at Western Sydney University with 80 credit points advanced standing.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)
700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700073.2	Fundamentals of Exercise Science (WSTC)

UWSCollege Admission Pathway - WSTC Health Science (HPE) Extended Non-Credentialed Applicants

A7017.1

Location

Campus	Mode
Bankstown Campus	Internal
Lithgow site	Internal
Penrith Campus	Internal
The College - Nirimba Education Precinct	Internal

Specialisation Structure

This course will be available at Bankstown campus from 2016 for courses 7090 and 7091.

Students must be enrolled in 7069 Diploma in Health Science (Personal Development, Health and Physical Education Pathway) Extended, 7079 Bachelor of Health Science (PDHPEP) Extended (WSTC First Year Program), 7090 Diploma in Health Science (Health and Physical Education) Extended or 7091 Bachelor of Health Science (Health and Physical Education) Extended (WSTC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700209.2	Introduction to Academic Communication 1 (WSTC Prep)
700225.2	Academic Skills for Health Science (WSTC Prep)
700226.2	Health Care Environments (WSTC Prep)
700227.2	Literacy in Health Science (WSTC Prep)
700210.2	Introduction to Academic Communication 2 (WSTC Prep)
700190.2	Fundamentals of Health Science (WSTC Prep)

University level Units

Students must pass the following University level units, which will allow students to enter the second year of the Bachelor of Health Science (PDHPE) course at Western Sydney University with 80 credit points advanced standing.

700067.2	Professional Health Competencies (WSTC)
700066.3	Population Health and Society (WSTC)
700062.3	Communication in Health (WSTC)
700060.2	Psychology and Health (WSTC)
700061.3	Introduction to Human Biology (WSTC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 214

700064.2	Foundations of Research and Evidence-Based Practice (WSTC)
700065.3	Approaches to Health Promotion (WSTC)
700073.2	Fundamentals of Exercise Science (WSTC)

UWSCollege Admission Pathway - WSTC Science Extended Local Recent School Leavers

A7042.1

Location

Campus	Mode
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7086 Diploma in Science Extended or 7087 Bachelor of Science Extended (UWSC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700198.2	Academic Communication 1 (WSTC Prep)
700230.2	Academic Skills for Science (WSTC Prep)
700231.2	Fundamentals of Science (WSTC Prep)
700232.2	Focus on Biology (WSTC Prep)

Students must attempt/complete the following preparatory unit for which no advanced standing will be granted in the Western Sydney University degree program.

| 700043.3 | Chemistry (WSTC Prep) |

University level Units

Students must pass the following University level units.

700095.2	Biodiversity (WSTC)
700125.2	Cell Biology (WSTC)
700122.2	Essential Chemistry 2 (WSTC)
700124.2	Scientific Literacy (WSTC)
700123.2	Quantitative Thinking (WSTC)

Students must pass one of the following two University level units

| 700121.3 | Essential Chemistry 1 (WSTC) |
| 700155.2 | Introductory Chemistry (WSTC) |

Students must pass two of the following four University level units (dependent upon which Western Sydney University degree they wish to enter upon successful completion of their studies ie Bachelor of Science, Bachelor of Natural Science or Bachelor of Medical Science)

700099.2	Resource Sustainability (WSTC)
700096.3	Integrated Science (WSTC)
700097.2	Introduction to Anatomy (WSTC)
700098.2	Introduction to Physiology (WSTC)

UWSCollege Admission Pathway - WSTC Science Extended International Students

A7043.1

Location

Campus	Mode
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7086 Diploma in Science Extended to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700207.2	English for Tertiary Study 1 (WSTC Prep)
700230.2	Academic Skills for Science (WSTC Prep)
700231.2	Fundamentals of Science (WSTC Prep)
700232.2	Focus on Biology (WSTC Prep)

Students must attempt/complete the following preparatory unit for which no advanced standing will be granted in the Western Sydney University degree program

| 700043.3 | Chemistry (WSTC Prep) |

University level Units

Students must pass the following University level units

700095.2	Biodiversity (WSTC)
700125.2	Cell Biology (WSTC)
700122.2	Essential Chemistry 2 (WSTC)
700124.2	Scientific Literacy (WSTC)
700123.2	Quantitative Thinking (WSTC)

Students must pass one of the following two University level units

| 700121.3 | Essential Chemistry 1 (WSTC) |
| 700155.2 | Introductory Chemistry (WSTC) |

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 215

Students must pass two of the following four University level units (dependent upon which Western Sydney University degree they wish to enter upon successful completion of their studies ie Bachelor of Science, Bachelor of Natural Science or Bachelor of Medical Science)

700099.2	Resource Sustainability (WSTC)
700096.3	Integrated Science (WSTC)
700097.2	Introduction to Anatomy (WSTC)
700098.2	Introduction to Physiology (WSTC)

UWSCollege Admission Pathway - WSTC Science Extended Non-Credentialed Applicants

A7044.1

Location

Campus	Mode
The College - Nirimba Education Precinct	Internal

Specialisation Structure

Students must be enrolled in 7086 Diploma in Science Extended or 7087 Bachelor of Science Extended (UWSC First Year Program) to complete this specialisation.

Students must pass the following preparatory units for which no advanced standing will be granted in the Western Sydney University degree program.

Note that students must pass 40 credit points from the following preparatory units prior to enrolling in the University level units listed below.

Preparatory Units

700209.2	Introduction to Academic Communication 1 (WSTC Prep)
700230.2	Academic Skills for Science (WSTC Prep)
700231.2	Fundamentals of Science (WSTC Prep)
700232.2	Focus on Biology (WSTC Prep)

Students must attempt/complete the following preparatory unit for which no advanced standing will be granted in the Western Sydney University degree program

700043.3	Chemistry (WSTC Prep)

University level Units

Students must pass the following University level units.

700095.2	Biodiversity (WSTC)
700125.2	Cell Biology (WSTC)
700122.2	Essential Chemistry 2 (WSTC)
700124.2	Scientific Literacy (WSTC)
700123.2	Quantitative Thinking (WSTC)

Students must pass one of the following two University level units

700121.3	Essential Chemistry 1 (WSTC)
700155.2	Introductory Chemistry (WSTC)

Students must pass two of the following four University level units (dependent upon which Western Sydney University degree they wish to enter upon successful completion of their studies ie Bachelor of Science, Bachelor of Natural Science or Bachelor of Medical Science)

700099.2	Resource Sustainability (WSTC)
700096.3	Integrated Science (WSTC)
700097.2	Introduction to Anatomy (WSTC)
700098.2	Introduction to Physiology (WSTC)

Key Program - General Program

KP3027.1

Specialisation Structure

Students completing the Bachelor of Science (Advanced Science) General will complete the following course structure.

Qualifying for this award requires successful completion of 240 credit points within the following rules.

Level 1

Six Level 1 science core units must be completed by including the following

- at least one mathematics or statistics unit

- one academic skills unit

- at least four other science foundation units from the unit set structure below, which must come from a further two science disciplines out of the following: Biology, Chemistry, Computer Science or Physics

Levels 2 and 3

- at least thirteen more science units must be selected from the unit set structure below; three of these must be Advanced Science Project units
- at least one Major specialisation must be completed

- at least 60 credit points must be taken at Level 3, of which at least 40 credit points must be for science units taken from the unit set structure below
- 300924 Science Research Project must be completed as the capstone unit

Students must complete at least one of the following majors

- Hawkesbury: Marine Biology, Biochemistry and Molecular Biology, Climate Change, Conservation Biology, Environmental Consulting, Forensic Science, Microbiology, General Biology, Nutrition and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 216

Physiology, Zoology. Please note: the Mathematics major cannot be completed on Hawkesbury campus.
- Parramatta: Biochemistry and Molecular Biology, Chemistry, General Biology, Mathematics
- Campbelltown: Biochemistry and Molecular Biology, Chemistry, General Biology, Mathematics

Hawkesbury Campus

Year 1

Autumn session

Non-mathematics majors: choose at least one appropriate mathematics or statistics unit in your first year.

Students cannot do a mathematics major on the Hawkesbury campus.

300811.1	Scientific Literacy

Choose three of

300802.1	Biodiversity
300828.1	Physics 1
300831.2	Quantitative Thinking
300800.2	Essential Chemistry 1

Or

300808.2	Introductory Chemistry

Note: Only one chemistry unit may be selected

External offering only

200263.5	Biometry
300830.2	Analysis of Change

Spring session
Choose at least two of

300803.1	Essential Chemistry 2
300816.1	Cell Biology
300818.1	Introduction to Physiology
200263.5	Biometry
300830.2	Analysis of Change
300831.2	Quantitative Thinking

And two electives

Year 2

Autumn session

300937.1	Advanced Science Project A

Choose at least three of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300837.1	Climate Change Science
300843.1	Forensic and Environmental Analysis
300876.1	Organic Chemistry
300931.1	Integrated Science
300980.1	Principles of Evolution

Spring session

300938.1	Advanced Science Project B

Choose at least three of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300839.1	Ecology
300836.1	Botany
300979.1	Principles of Zoology
300876.1	Organic Chemistry
300959.1	Mangamai'bangawarra: Indigenous Science

Year 3

Autumn session

300910.1	Advanced Science Project C

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300921.1	Plant Health and Biosecurity
300919.1	Occupational Health and Safety
300857.1	Environmental Geochemistry
300866.1	Analytical Microbiology
300851.1	Advanced Physiology
300978.1	Marine and Aquatic Ecology
300856.1	Ecosystem Carbon Accounting

And one elective

Spring session

300924.1	Science Research Project

Choose at least two of

300905.1	Advanced Immunology
300927.2	Molecular Medicine
300855.1	Conservation Biology
300826.1	Medical Microbiology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology
300909.1	Biological Adaptation to Climate Change
300883.1	Laboratory Quality Management

And one elective

Parramatta Campus

Year 1

Autumn session

Non-mathematics majors: choose at least one appropriate mathematics or statistics unit in your first year

300811.1	Scientific Literacy

Choose three of

300802.1	Biodiversity
300828.1	Physics 1
300580.2	Programming Fundamentals
300830.2	Analysis of Change
300831.2	Quantitative Thinking

300672.2	Mathematics 1A
200025.2	Discrete Mathematics
300800.2	Essential Chemistry 1

Or

300808.2	Introductory Chemistry

Note: Only one chemistry unit may be selected

External offering only

200263.5	Biometry

Spring session
Choose at least two of

300803.1	Essential Chemistry 2
300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300580.2	Programming Fundamentals
200263.5	Biometry
300672.2	Mathematics 1A
300673.2	Mathematics 1B
301031.1	Computer Algebra

External offering only

300830.2	Analysis of Change
300831.2	Quantitative Thinking

And two electives

Year 2

Autumn session

300937.1	Advanced Science Project A

Choose at least three of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300931.1	Integrated Science
200027.2	Linear Algebra
200028.3	Advanced Calculus
301033.1	Introduction to Data Science

Spring session

300938.1	Advanced Science Project B

Choose at least three of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300847.2	Immunology
300838.1	Comparative Physiology
300839.1	Ecology
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry
200030.4	Differential Equations
301032.1	Making Sense of Data

Year 3

Autumn session

300910.1	Advanced Science Project C

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300851.1	Advanced Physiology
300907.1	Advanced Inorganic Chemistry
300926.1	Advanced Physical Chemistry
300857.1	Environmental Geochemistry
200193.2	Abstract Algebra
301034.1	Predictive Modelling
200023.3	Analysis

And one elective

Spring session
Choose at least one Capstone unit

300924.1	Science Research Project
200045.3	Quantitative Project

Choose at least two of

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300855.1	Conservation Biology
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
301035.1	Environmental Informatics
200022.3	Mathematical Modelling

And one elective

Campbelltown Campus

Year 1

Autumn session
Non-mathematics majors: choose at least one mathematics or statistics unit in your first year

300811.1	Scientific Literacy

Choose three of

300802.1	Biodiversity
300828.1	Physics 1
300580.2	Programming Fundamentals
300830.2	Analysis of Change
300831.2	Quantitative Thinking
200263.5	Biometry
300672.2	Mathematics 1A
200025.2	Discrete Mathematics
300800.2	Essential Chemistry 1

Or

300808.2	Introductory Chemistry

Note: Only one chemistry unit may be selected

Spring session
Choose at least two of

300803.1	Essential Chemistry 2

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 218

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300580.2	Programming Fundamentals
300672.2	Mathematics 1A
300673.2	Mathematics 1B
301031.1	Computer Algebra
200263.5	Biometry
300830.2	Analysis of Change
300831.2	Quantitative Thinking

And two electives

Year 2

Autumn session

300937.1	Advanced Science Project A

Choose at least three of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300876.1	Organic Chemistry
300832.1	Analytical Chemistry
300930.1	Classical Physics and Advanced Technologies
300931.1	Integrated Science
200027.2	Linear Algebra
200028.3	Advanced Calculus
301033.1	Introduction to Data Science

Spring Session

300938.1	Advanced Science Project B

Choose at least three of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300838.1	Comparative Physiology
300847.2	Immunology
300839.1	Ecology
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry
200030.4	Differential Equations
301032.1	Making Sense of Data

Year 3

Autumn session

300910.1	Advanced Science Project C

Choose at least two of

300820.1	Genes, Genomics and Human Health
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
300851.1	Advanced Physiology
300907.1	Advanced Inorganic Chemistry
300912.1	Molecular Pharmacokinetics
200193.2	Abstract Algebra
301034.1	Predictive Modelling
200023.3	Analysis

And one elective

Spring session

Choose at least one Capstone unit

300924.1	Science Research Project
200045.3	Quantitative Project

Choose at least two of

300905.1	Advanced Immunology
300826.1	Medical Microbiology
300927.2	Molecular Medicine
300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry
300923.1	Quantum Physics
301035.1	Environmental Informatics
200022.3	Mathematical Modelling

And one elective

Key Program - Biological Science

KT3128.1

The biological sciences are diverse, fascinating, rapidly changing, and essential to our understanding of living systems at scales ranging from the molecular to the global. They play a vital role in our understanding of the environment, as well as animals, plants and micro-organisms, and are essential to a wide range of contemporary industries. A Bachelor of Science (Biological Science) offers a solid foundation in the basic sciences, including biology, microbiology, biochemistry and environmental science. You will be equipped to enter government, industry or research-based employment in this area (e.g. biotechnology companies, pathology, quality assurance, university and hospital laboratories, scientific sales and government agencies).

Specialisation Structure

Students completing the Bachelor of Science (Advanced Science) (Biological Science) will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Choose one of

300672.2	Mathematics 1A
200263.5	Biometry
300830.2	Analysis of Change
300831.2	Quantitative Thinking

Spring session

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 219

300816.1   Cell Biology
300803.1   Essential Chemistry 2
300818.1   Introduction to Physiology

And one elective

Year 2

Autumn session

300937.1   Advanced Science Project A
300936.1   Functional Proteins and Genes
300833.1   Microbiology 1

Choose one of

300845.1   Genetics

Hawkesbury campus only

300980.1   Principles of Evolution

Spring session

300938.1   Advanced Science Project B
300817.1   Molecular Biology

Choose two more Level 2 science units from the list below

300848.1   Metabolism
300896.1   Microbiology 2
300838.1   Comparative Physiology
300847.2   Immunology
300839.1   Ecology
300876.1   Organic Chemistry
300832.1   Analytical Chemistry
301032.1   Making Sense of Data
301033.1   Introduction to Data Science
300959.1   Mangamai'bangawarra: Indigenous Science

Hawkesbury only

300979.1   Principles of Zoology
300836.1   Botany

Year 3

Autumn session

300910.1   Advanced Science Project C

And one Level 3 elective unit

Hawkesbury Campus

Choose at least two of

300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300921.1   Plant Health and Biosecurity
300865.1   Plant Physiology
300837.1   Climate Change Science
300856.1   Ecosystem Carbon Accounting
300919.1   Occupational Health and Safety
300866.1   Analytical Microbiology
300851.1   Advanced Physiology
300978.1   Marine and Aquatic Ecology

Parramatta Campus

Choose at least two of

300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300851.1   Advanced Physiology
300865.1   Plant Physiology

Campbelltown Campus

Choose at least two of

300820.1   Genes, Genomics and Human Health
300850.1   Advanced Cell Biology
300819.1   Topics in Physiology
300851.1   Advanced Physiology

Spring session

Capstone unit

300924.1   Science Research Project

And one Level 3 elective unit

Hawkesbury Campus

Choose at least two of

300905.1   Advanced Immunology
300826.1   Medical Microbiology
300861.1   Vertebrate Biodiversity
300918.1   Invertebrate Biology
300927.2   Molecular Medicine
300855.1   Conservation Biology
300909.1   Biological Adaptation to Climate Change
300883.1   Laboratory Quality Management

Parramatta Campus

Choose at least two of

300905.1   Advanced Immunology
300826.1   Medical Microbiology
300855.1   Conservation Biology

Campbelltown Campus

Choose at least two of

300905.1   Advanced Immunology
300826.1   Medical Microbiology
300927.2   Molecular Medicine

Key Program - Chemistry

KT3129.1

A Bachelor of Science (Chemistry) will prepare you to take part in a process of inquiry, by both contributing to it and by using scientific knowledge to solve current problems. The Chemistry program provides a strong background in the key topic areas of contemporary chemistry, including

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 220

aspects of chemical theory in analytical, inorganic, organic and physical chemistry, with a strong emphasis on practical laboratory skills, and applications in contemporary research, industry and the environment. A research project is available to students in the final year of the degree preparing you for a professional career in a wide range of chemistry based industries.

Specialisation Structure

Students completing the Bachelor of Science (Advanced Science) (Chemistry) will complete the following course structure.

Year 1

Autumn session

300800.2	Essential Chemistry 1
300811.1	Scientific Literacy
300828.1	Physics 1

Choose one of

300802.1	Biodiversity
300831.2	Quantitative Thinking
300830.2	Analysis of Change
200263.5	Biometry
200025.2	Discrete Mathematics
300580.2	Programming Fundamentals

Spring session

300803.1	Essential Chemistry 2

Choose one of

300672.2	Mathematics 1A
300830.2	Analysis of Change

Choose one of

300816.1	Cell Biology
300818.1	Introduction to Physiology
300829.1	Physics 2
300673.2	Mathematics 1B
200263.5	Biometry
300580.2	Programming Fundamentals

And one elective

Year 2

Autumn session

300937.1	Advanced Science Project A
300876.1	Organic Chemistry
300832.1	Analytical Chemistry

Choose at least one of

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300845.1	Genetics
300865.1	Plant Physiology
300931.1	Integrated Science
200027.2	Linear Algebra
200028.3	Advanced Calculus

Spring session

300938.1	Advanced Science Project B
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry

Choose at least one of

300848.1	Metabolism
300896.1	Microbiology 2
300817.1	Molecular Biology
300847.2	Immunology
300838.1	Comparative Physiology
300839.1	Ecology
200030.4	Differential Equations
301032.1	Making Sense of Data
301033.1	Introduction to Data Science
300959.1	Mangamai'bangawarra: Indigenous Science

Year 3

Autumn session

300910.1	Advanced Science Project C
300907.1	Advanced Inorganic Chemistry

Choose one of

300926.1	Advanced Physical Chemistry
300912.1	Molecular Pharmacokinetics

And one Level 3 elective

Spring session

Capstone Unit

300924.1	Science Research Project

And

300925.1	Advanced Analytical Chemistry
300906.1	Advanced Organic Chemistry

And one elective

Key Program - Nutrition and Food Science

KT3132.1

Healthy eating is a vital part of good health. There is more to healthy eating than you realise. A Bachelor of Science (Nutrition and Food Science) will prepare you for the future by developing the skills and knowledge to solve future challenges in nutrition and health, food quality and security. The majors will allow further specialisation in your studies in Nutrition and Food Science and allow a wide range of careers in community nutrition and health promotion ensuring healthy diets and lifestyles for good health. The program has strong industry and community links, well-equipped facilities including food processing pilot plant and modern kitchen facilities. A major in Human Nutrition investigates healthy eating as a vital part of maintaining good health and health promotion. The major covers specialised studies in applied and community nutrition, metabolism and human physiology, preparing students for careers in community nutrition, health promotion and education, or work in a range of food and nutrition related businesses, including new product development of healthy foods A major in Food Science explores the science behind

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 221

food, its preparation, manufacture, storage and preservation. The major covers specialised topics in food processing, quality assurance, product development, postharvest, packaging, microbiological and chemical analysis of foods preparing you for a wide range of careers in the food and beverage related industries, including food product development, quality assurance, food regulations, research and development, plus management of fresh food supply. A major in Food Technology Secondary Teaching brings together food science and nutrition with education studies to meet the graduate requirements for teaching food technology. The major includes specialised studies in food processing, food product development, nutrition, contemporary food issues, and growing crops for school garden projects. It will also address issues in the food marketplace relevant to the Australian food industry and prepare you to teach biology, chemistry or design and technology as additional first or second teaching areas, or design and technology depending on electives selected.

Specialisation Structure

Students completing the Bachelor of Science (Advanced Science) (Nutrition and Food Science) will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above. (Some students may need to take an elective as a Level 3 unit)

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Choose one of

300672.2	Mathematics 1A
200263.5	Biometry
300830.2	Analysis of Change
300831.2	Quantitative Thinking

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300805.1	Food Science 1
300937.1	Advanced Science Project A

Students in the Human Nutrition Major (Advanced) complete the following as their fourth unit

300818.1	Introduction to Physiology

Note: 300937 - Advanced Science Project A is situated in Semester 2 for administrative purposes only. This unit will be completed at an appropriate time in Semester 3 or 5 after consultation with the Director of Academic Programs.

Year 2

Autumn session

300936.1	Functional Proteins and Genes

300833.1	Microbiology 1
300842.2	Food Science 2
300933.1	Nutrition and Health 1
300937.1	Advanced Science Project A

300937 - Advanced Project A: enrol in this unit as a fifth unit in Year 2 Autumn semester; attend Workshop in Autumn mid-semester break and complete literature review by end of July.

Spring session

300938.1	Advanced Science Project B
300879.1	Experimental Foods

Human Nutrition Major (Advanced)

300934.1	Nutrition and Health 2
300848.1	Metabolism

Food Science Major (Advanced)

300859.1	Food Safety
300869.1	Postharvest

Year 3

Autumn session

300910.1	Advanced Science Project C
300922.2	Quality Assurance and Food Analysis

Human Nutrition Major (Advanced)

300851.1	Advanced Physiology

Students in the Human Nutrition Major may wish to complete an optional extra unit in this semester: choose one of

300819.1	Topics in Physiology
300928.1	Consumer Issues in Nutrition

Food Science Major (Advanced)

300871.1	Culinary Science

Choose one of

300866.1	Analytical Microbiology
300843.1	Forensic and Environmental Analysis

Spring session

Capstone Unit

300924.1	Science Research Project
300915.1	Food Product Development

Human Nutrition Major (Advanced)

300908.1	Applied Nutrition
300917.1	Global Nutrition, Food and Community

Food Science Major (Advanced)

300904.1	Advanced Food Science and Technology
300883.1	Laboratory Quality Management

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 222

All students must satisfactorily complete the unit 300655 - Approved Industrial Experience (10 weeks), comprising a minimum of ten weeks Approved Industrial Experience.

300655.2   Approved Industrial Experience

Key Program - Zoology

KT3134.1

A Bachelor of Science (Zoology) recognises the increased demand for scientific knowledge of how to conserve, protect and care for animals, including native wildlife, and companion and production animals. It will enable you to develop an in-depth scientific understanding of how animals function and interact with their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organs systems, as well as the structure and function of biomolecules and cells. The key learning and research areas embodied in this degree are ecology, evolution, physiology, growth, reproduction, genetics, and conservation biology. On-campus animal facilities include those for reptiles, small marsupials, small rodents, horses, sheep and cattle, as well as over 1,000ha of native, rural and aquatic habitats.

Specialisation Structure

Students completing the Bachelor of Science (Advanced Science) (Zoology) will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300813.1	Wildlife Studies

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300801.1	Animal Science

Choose one of

300672.2	Mathematics 1A
200263.5	Biometry
300830.2	Analysis of Change
300831.2	Quantitative Thinking

Year 2

Autumn session

300937.1	Advanced Science Project A

300834.1	Animal Health and Welfare
300936.1	Functional Proteins and Genes
300980.1	Principles of Evolution

Spring session

300938.1	Advanced Science Project B
300838.1	Comparative Physiology
300839.1	Ecology
300979.1	Principles of Zoology

Year 3

Autumn session

300910.1	Advanced Science Project C
300878.1	Animal Behaviour
300978.1	Marine and Aquatic Ecology

And one elective

Spring session

300924.1	Science Research Project
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change

Choose one of

300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity

Key Program - Environmental Science

KT3148.1

Specialisation Structure

Students completing the Bachelor of Science (Advanced Science) (Environmental Science) will complete the following course structure.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300824.1	Management of Aquatic Environments

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300810.1	Resource Sustainability

Choose one of

101646.2	Analysis of Spatial Data
300812.1	Understanding Landscape

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 223

Year 2

Autumn session

300937.1	Advanced Science Project A
300837.1	Climate Change Science

Choose one of

300833.1	Microbiology 1
300843.1	Forensic and Environmental Analysis

Choose one of

300672.2	Mathematics 1A
200263.5	Biometry
300830.2	Analysis of Change
300831.2	Quantitative Thinking

Spring session

300938.1	Advanced Science Project B
300839.1	Ecology
300841.1	Environmental Regulation and Policy

Choose one of

300836.1	Botany
300861.1	Vertebrate Biodiversity

Year 3

Autumn session

300910.1	Advanced Science Project C
300978.1	Marine and Aquatic Ecology
300857.1	Environmental Geochemistry
300856.1	Ecosystem Carbon Accounting

Spring session

300924.1	Science Research Project
300855.1	Conservation Biology
300909.1	Biological Adaptation to Climate Change

Choose one of

300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity

Key Program - Forensic Science

KT3149.1

This is a three year program that produces scientists who have a good background in the biological and chemical sciences, coupled with specialised expertise in forensic science, including methods of forensic analysis, crime scene investigation, forensic photography, forensic investigation, crime and criminal justice and complex case. Students may opt to further specialise in forensic biology, chemistry or microbiology by selecting additional electives or studies in a related or unrelated discipline. Career opportunities include forensic scientists, crime scene investigators, private investigators and consultants, police officers, drug analysts, researchers and academics, and

specialised forensic science practitioners. The main employers of forensic scientists are State and Federal police services, State and Commonwealth Government Health Departments and analytical chemical laboratories. Graduates will be versatile with a wide skills base with (depending on their choice of electives) potential for employment in analytical chemistry and microbiology, quality control and assurance, biochemistry and molecular biology, scientific research, education and the chemical industry.

Specialisation Structure

Students completing the Bachelor of Science (Advanced Science) (Forensic Science) will complete the following course structure.

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300806.1	Forensic Science

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300874.2	Digital Forensic Photography
200263.5	Biometry

Year 2

Autumn session

300937.1	Advanced Science Project A
300843.1	Forensic and Environmental Analysis
300845.1	Genetics
300825.2	Introduction to Anatomy

Spring session

300938.1	Advanced Science Project B
300873.2	Crime Scene Investigation
300817.1	Molecular Biology
401171.1	Imaging Science

Year 3

Autumn session

300910.1	Advanced Science Project C
300981.1	Environmental Forensic Investigations
300868.1	Forensic Chemistry
301120.1	Forensic Anthropology

Spring session

300924.1	Science Research Project
300911.1	Complex Forensic Studies
401170.1	Forensic Biology
300883.1	Laboratory Quality Management

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 224

Major - Crime Scene Investigation

M4012.1   Crime Scene Investigation

Key Program - Mathematical Sciences

KT3150.1

A Bachelor of Science (Mathematical Science) provides you with a strong background in key analytical techniques that have contemporary applications such as the treatment and interpretation of data and the modelling of real-world problems such as global warming. You will develop skills that allow you to model and solve real world problems using mathematical techniques and have the opportunity to specialise in mathematics, statistics or a combination of both. This will provide you with a wide range of career options in commercial and government institutions, which require highly-skilled problem-solvers. There are also a range of majors (e.g. biology, chemistry) and sub-majors offered in Science that can add diversity and/or focus to your degree. There are also a range of sub-majors from other disciplines such as the arts, business, humanities and social sciences to choose from, although these may require cross campus study and are subject to availability and timetabling.

Specialisation Structure

Students completing the Bachelor of Science (Advanced Science) (Mathematical Sciences) will complete the following course structure.

Year 1

Autumn session

300672.2   Mathematics 1A
300811.1   Scientific Literacy
200025.2   Discrete Mathematics

Choose one of

300802.1   Biodiversity
300828.1   Physics 1
300800.2   Essential Chemistry 1
300808.2   Introductory Chemistry

Spring session

301031.1   Computer Algebra
300673.2   Mathematics 1B
200263.5   Biometry

Choose one Information Technology unit, except: 300134 Introduction to Information Technology

And one elective

Year 2

Autumn session

300937.1   Advanced Science Project A
200027.2   Linear Algebra
200028.3   Advanced Calculus
301033.1   Introduction to Data Science

Spring session

300938.1   Advanced Science Project B
200030.4   Differential Equations
301032.1   Making Sense of Data

Choose one of

300816.1   Cell Biology
300803.1   Essential Chemistry 2
300829.1   Physics 2

Year 3

Autumn session

300910.1   Advanced Science Project C
200193.2   Abstract Algebra
301034.1   Predictive Modelling
200023.3   Analysis

Spring session

200045.3   Quantitative Project
301035.1   Environmental Informatics
200022.3   Mathematical Modelling

And one elective

Key Program - Health Promotion

KT4000.1

Health Promotion extends beyond raising awareness of healthcare issues to developing and implementing strategies for communities, individuals and policy-makers to improve their health and wellbeing. Health Promotion graduates help communities and individuals to change their behaviour, working with employers, not-for-profit foundations, disability councils, the public health sector, community health centres, youth centres, schools and local government. Health promotion projects are as diverse as injury prevention, skin cancer prevention, HIV/AIDS awareness and community development. The program combines studies of health politics and planning, health promotion practice, injury prevention, public health with a comprehensive foundation of the health sciences to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program. There is room for electives in particular areas of interest opening up a richer experience of university life or a double major in two of the areas of Health Promotion, Health Services Management or Therapeutic Recreation.

Location

Campus	Mode
Campbelltown Campus	Internal

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 225

Specialisation Structure

Qualification for this Key Program requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time - Start Year Intake

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.4	Health Services Management

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

And one elective

Recommended elective

400244.2	Introduction to Leisure and Recreation Theory

Spring session

401195.1	Health Politics, Policy and Planning
400286.3	Injury Prevention
400285.2	Public Health

And one elective

Year 3

Autumn session

400275.2	Health Planning Project
400784.3	Health Promotion Practice 1

And two electives

Spring session

400785.2	Health Promotion Practice 2
400249.2	Ethical and Legal Issues in Health Care
400786.2	Professional Transition Project

And one elective

Full-time - Mid Year Intake

Year 1

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.4	Health Services Management

Year 2

Autumn session

400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies
400870.2	Population Health and Society
400867.2	Approaches to Health Promotion

Spring session

401195.1	Health Politics, Policy and Planning
400286.3	Injury Prevention
400285.2	Public Health

And one elective

Year 3

Autumn session

300361.3	Introduction to Human Biology
400784.3	Health Promotion Practice 1
400866.3	Culture, Diversity and Health

And one elective

Recommended elective

400244.2	Introduction to Leisure and Recreation Theory

Spring session

400785.2	Health Promotion Practice 2
400249.2	Ethical and Legal Issues in Health Care
400786.2	Professional Transition Project

And one elective

Year 4

Autumn session

400864.3	Research Methods (Quantitative and Qualitative)
400275.2	Health Planning Project

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 226

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Health Services Management

KT4001.1

Health Services Management plays a vital role in society, in ensuring that public investment in health is well spent, and that private healthcare businesses deliver effective, efficient services. It puts management studies in the distinctive context of the health sector to integrate clinical understanding, management skills and knowledge of the health care system and policy development. Health Services Management graduates are in demand to work in quality improvement, financial management and occupational health and safety. Two areas of growth are in mental health services and the aged care sector. Graduates will be skilled in managing and responding to rapid changes within the health care system and in areas that deal with policy initiative, development and evaluation. The program combines studies of managing people, resources and finances with a comprehensive foundation of the health sciences to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program. There is room for electives in particular areas of interest opening up a richer experience of university life or a double major in two of the areas of Health Promotion, Health Services Management or Therapeutic Recreation.

Location

Campus	Mode
Campbelltown Campus	Internal

Specialisation Structure

Professional Accreditation

The Bachelor of Health Science (Health Service Management) has Professional Accreditation with the Australasian College of Health Service Management.

Qualification for this Key Program requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Full-time - Start Year Intake

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400277.4	Health Services Management
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

And one elective

Recommended elective

| 400244.2 | Introduction to Leisure and Recreation Theory |

Spring session

| 401195.1 | Health Politics, Policy and Planning |
| 400249.2 | Ethical and Legal Issues in Health Care |

And two electives

Year 3

Autumn session

| 400275.2 | Health Planning Project |
| 400787.2 | Health Services Management Practice |

And two electives

Spring session

400279.4	Health Services Financial Management
400788.3	Health Services Workforce Management
400786.2	Professional Transition Project

And one elective

Full-time - Mid Year Intake

Year 1

Spring session

101614.2	Psychology and Health
400277.4	Health Services Management
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

Year 2

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

| 401195.1 | Health Politics, Policy and Planning |
| 400249.2 | Ethical and Legal Issues in Health Care |

And two electives

Year 3

Autumn session

400867.2	Approaches to Health Promotion
400787.2	Health Services Management Practice
400866.3	Culture, Diversity and Health

And one elective

Recommended elective

400244.2	Introduction to Leisure and Recreation Theory

Spring session

400788.3	Health Services Workforce Management
400279.4	Health Services Financial Management
400786.2	Professional Transition Project

And one elective

Year 4

Autumn session

400275.2	Health Planning Project
400864.3	Research Methods (Quantitative and Qualitative)

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Therapeutic Recreation

KT4002.1

Therapeutic Recreation is the link between leisure and health improvement, using recreation as a way to improve quality of life. Therapeutic Recreation graduates work with patients to use leisure activities to improve health and life quality, for example in rehabilitation centres and psychiatric units, special schools, day care centres. aged care facilities, or in local government or community settings. The program combines theory and practice in learning, education programming, aged care, disability and mental health with a comprehensive foundation of the health sciences to develop the professional competencies important for ethical and safe practice and high quality care and the skills to work in multidisciplinary teams. Evidence-based practice is one of the most important trends in healthcare today and a strong feature of the program. There is room for electives in particular areas of interest opening up a richer experience of university life or a double major in two of the areas of

Health Promotion, Health Services Management or Therapeutic Recreation.

Location

Campus	Mode
Campbelltown Campus	Internal

Specialisation Structure

Professional Accreditation

Accreditation from the Diversional Therapy Association of Australia (for Therapeutic Recreation Key Program) has been granted.

Qualification for this Key Program requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Recommended Sequence

Full-time - Start Year Intake

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.4	Health Services Management

Year 2

Autumn session

400867.2	Approaches to Health Promotion
400244.2	Introduction to Leisure and Recreation Theory
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

400968.2	Professional Practice in Aged Care and Disability
400246.4	Workplace Learning 1 (Therapeutic Recreation)

And two electives

Year 3

Autumn session

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 228

400789.3   Leisure Education Programming and Mental Health
400252.3   Workplace Learning 2 (Community Placement)

And two electives

Spring session

400786.2   Professional Transition Project
400249.2   Ethical and Legal Issues in Health Care
400254.2   Therapeutic Recreation Professional Project

And one elective

Full-time - Mid Year Intake

Year 1

Spring session

101614.2   Psychology and Health
400863.2   Foundations of Research and Evidence-Based Practice
400732.2   Communication in Health

And one elective
Recommended elective

400277.4   Health Services Management

Year 2

Autumn session

400244.2   Introduction to Leisure and Recreation Theory
400783.2   Professional Pathways in Health Science
400871.2   Professional Health Competencies
400870.2   Population Health and Society

Spring session

400968.2   Professional Practice in Aged Care and Disability
400246.4   Workplace Learning 1 (Therapeutic Recreation)

And two electives

Year 3

Autumn session

300361.3   Introduction to Human Biology
400867.2   Approaches to Health Promotion
400866.3   Culture, Diversity and Health
400252.3   Workplace Learning 2 (Community Placement)

Spring session

400786.2   Professional Transition Project
400249.2   Ethical and Legal Issues in Health Care
400254.2   Therapeutic Recreation Professional Project

And one elective

Year 4

Autumn session

400864.3   Research Methods (Quantitative and Qualitative)
400789.3   Leisure Education Programming and Mental Health

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Key Program - Public Health

KT4004.1

Public health professionals are required to assess and respond to emerging public health issues. Public Health graduates work in a variety of settings, including health departments, community organisations, the pharmaceutical industry, corporate wellness programs, centres for disease control, environmental protection agencies and research. Public health projects cover a wide range of areas, such as health and health care programs, disease prevention and control, data analysis and clinical trials, environmental and occupational health, community outreach and fund-raising. The program combines studies of the determinants of health, which include social and environmental factors, in addition to physical risk factors, health promotion, health politics and planning, epidemiology and health promotion practice. There is a comprehensive foundation of the health sciences to develop the professional competencies important for ethical and multidisciplinary practice. Evidence-based practice is one of the most important requirements in healthcare today and a strong feature of the program. There is room for electives in areas of individual interest, allowing a richer experience of university life. The Public Health key program is a fully online course. All core units are offered online. Students are offered a selection of Western Sydney electives that are online. Students enrolled in the Public Health key program may choose to enrol into the same units offered in on-campus mode if they wish. Students who enrol into the Public Health key program and a major in one of the other 3 specialisations of 4656 will be required to attend on-campus classes for the second area of study.

Location

Campus	Mode
Online	Multi Modal

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 229

Specialisation Structure

Qualification for this Key Program requires the successful completion of 240 credit points including the units listed in the recommended sequence below.

Recommended Sequence

Full-time - Start Year Intake

Year 1

Autumn session

400870.2	Population Health and Society
300361.3	Introduction to Human Biology
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.4	Health Services Management

Year 2

Autumn session

400867.2	Approaches to Health Promotion
300872.1	Epidemiology
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

401195.1	Health Politics, Policy and Planning
400285.2	Public Health

And two electives

Year 3

Autumn session

400275.2	Health Planning Project
401194.1	Contemporary Issues in Public Health

And two electives

Spring session

400786.2	Professional Transition Project
400249.2	Ethical and Legal Issues in Health Care
401193.1	Public Health Practice

And one elective

Full-time - Mid Year Intake

Year 1

Spring session

101614.2	Psychology and Health
400863.2	Foundations of Research and Evidence-Based Practice
400732.2	Communication in Health

And one elective

Recommended elective

400277.4	Health Services Management

Year 2

Autumn session

300361.3	Introduction to Human Biology
400870.2	Population Health and Society
400783.2	Professional Pathways in Health Science
400871.2	Professional Health Competencies

Spring session

401195.1	Health Politics, Policy and Planning
400285.2	Public Health

And two electives

Year 3

Autumn session

400867.2	Approaches to Health Promotion
300872.1	Epidemiology
400864.3	Research Methods (Quantitative and Qualitative)
400866.3	Culture, Diversity and Health

Spring session

400786.2	Professional Transition Project
400249.2	Ethical and Legal Issues in Health Care
401193.1	Public Health Practice

And one elective

Year 4

Autumn session

400275.2	Health Planning Project
401194.1	Contemporary Issues in Public Health

And two electives

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 230

Major - Biochemistry and Molecular Biology

M3045.1

This major will equip students with knowledge and skills in fundamental biology and chemistry, biochemistry and molecular biology to allow students to enter industrial or research-based employment in this area (biotech companies, pathology, quality assurance, university and hospital labs and scientific sales, government policy analysis). As this area has expanding knowledge and technologies, outcomes also include the ability to read, critique and evaluate emerging research with the view to becoming a life-long learner in the field. The outcomes of this major would support honours or masters level research in this area.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Note: Three units must be at Level 3.

Level 1

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Level 2

300936.1	Functional Proteins and Genes
300848.1	Metabolism

Choose one of

300817.1	Molecular Biology
300847.2	Immunology
300845.1	Genetics

Level 3

300927.2	Molecular Medicine

Choose two of

300820.1	Genes, Genomics and Human Health
300905.1	Advanced Immunology
300850.1	Advanced Cell Biology

Major - Aquatic Biology

M3046.1

Aquatic and marine environments play vital roles in providing food, water, recreation and other ecosystem services to human society, as well as providing habitat for important species that make up global biodiversity. This major will equip students with the background knowledge and training to work in aquatic and marine environments, to learn skills in inquiry and problem solving, so that they can contribute beneficially to management and/or conservation of waterways and oceans and the biodiversity within them.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete the following eight units

Level 1

300802.1	Biodiversity
300824.1	Management of Aquatic Environments

Level 2

300838.1	Comparative Physiology
300839.1	Ecology
300877.1	Toxicology

Level 3

300929.1	Aquatic Ecology
300918.1	Invertebrate Biology
300870.1	Water in the Landscape

Major - Chemistry

M3047.1

This major will give students a solid grounding in chemistry as a scientific discipline; units can be selected to specialise in inorganic, organic, analytical or physical chemistry. Completion of the major will also qualify students as secondary school chemistry teachers.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 1

300800.2	Essential Chemistry 1
300803.1	Essential Chemistry 2

Level 2

Choose three of

300876.1	Organic Chemistry
300899.1	Inorganic Chemistry

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 231

300849.2   Physical Chemistry

*Students may only choose one unit 300832 - Analytical Chemistry or 300843 - Forensic and Environmental Analysis

300832.1   Analytical Chemistry
300843.1   Forensic and Environmental Analysis

Level 3

Choose one of the following capstone units

300924.1   Science Research Project
300883.1   Laboratory Quality Management

And choose two of

300925.1   Advanced Analytical Chemistry
300907.1   Advanced Inorganic Chemistry
300906.1   Advanced Organic Chemistry
300926.1   Advanced Physical Chemistry
300891.1   Advanced Medicinal Chemistry
300920.1   Pharmacological Chemistry

Major - Conservation Biology

M3049.1

Conservation biology has emerged as a field of study from a synthesis of the ecological, demographic, genetic and societal risks faced by small natural populations. This major equips students with skills in fundamental biology, in the ecology of populations and communities, in population genetics and in the legal conservation framework to enable them to work in this area.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete eight units as follows. Five units must be from the Level 1 and 2 pools, with no more than three units at Level 1. Students must also complete three units at Level 3.

Level 1

300802.1   Biodiversity
300816.1   Cell Biology
300813.1   Wildlife Studies
300824.1   Management of Aquatic Environments

Level 2

300839.1   Ecology
300845.1   Genetics
300836.1   Botany

Level 3

Students must complete

300855.1   Conservation Biology

And choose two of

300929.1   Aquatic Ecology
300918.1   Invertebrate Biology
300861.1   Vertebrate Biodiversity

Major - General Biology

M3052.1

The major in General Biology gives students a broad training in biology, with the opportunity to select a program that ranges across the scale from macro- to micro- to molecular level processes. Completion of the major meets the requirements for secondary school biology teaching (post-graduate study is required to qualify as a teacher).

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete a maximum of three units from Level 1 and at least three units from Level 3.

Students must complete eight units as follows

Level 1

300802.1   Biodiversity
300816.1   Cell Biology

Choose six of the following units, including at least three at Level 3.

Level 1

300800.2   Essential Chemistry 1
300803.1   Essential Chemistry 2

Level 2

300936.1   Functional Proteins and Genes
300848.1   Metabolism
300817.1   Molecular Biology
300847.2   Immunology
300845.1   Genetics
300833.1   Microbiology 1
300896.1   Microbiology 2
300838.1   Comparative Physiology
300839.1   Ecology
300865.1   Plant Physiology
300836.1   Botany

Level 3

300851.1   Advanced Physiology
300866.1   Analytical Microbiology
300850.1   Advanced Cell Biology
300819.1   Topics in Physiology
300855.1   Conservation Biology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 232

300905.1	Advanced Immunology
300820.1	Genes, Genomics and Human Health
300826.1	Medical Microbiology
300927.2	Molecular Medicine
300929.1	Aquatic Ecology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management
300919.1	Occupational Health and Safety

Major - Mathematics

M3054.1

This major covers topics in the traditional areas of calculus and algebra. Single and multivariable calculus are covered, as well as topics in linear algebra, analysis and mathematical modelling. This major is available to all undergraduate students and may meet the NSW Institute of Teachers accreditation requirements for teaching Mathematics as a first subject in NSW state high schools.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 1

300672.2	Mathematics 1A
300673.2	Mathematics 1B
200025.2	Discrete Mathematics

Level 2

Choose two units from the level 2 units below

200030.4	Differential Equations
200028.3	Advanced Calculus
200027.2	Linear Algebra

Level 3

200193.2	Abstract Algebra
200022.3	Mathematical Modelling
200023.3	Analysis

Major - Zoology

M3056.1

This major trains students in how to best care for and protect our animals, by covering scientific knowledge of native wildlife, companion animals, and production animals. This major will allow students to develop scientific understanding of how animals function and interact with

their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organ systems, as well as down to structure and function of biomolecules and cells. On-campus animal facilities include those for reptiles, small marsupials, small rodents, horses, sheep and cattle, as well as over 1000ha of native, rural and aquatic habitat.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 1

Choose two of

300802.1	Biodiversity
300816.1	Cell Biology
300813.1	Wildlife Studies

Level 2

| 300838.1 | Comparative Physiology |

Choose two of

300839.1	Ecology
300845.1	Genetics
300853.1	Animal Nutrition and Feeding
300835.1	Animal Reproduction

Level 3

| 300909.1 | Biological Adaptation to Climate Change |

Choose two of

300929.1	Aquatic Ecology
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity
300878.1	Animal Behaviour

Major - Food Science & Technology

M3057.1

A major in Food Science and Technology explores the science behind food, its preparation and manufacture. The program covers specialised topics in food processing, quality assurance, new product development, postharvest, packaging, microbiological and chemical analysis of foods. The program aims to develop in depth scientific understanding of processes involved in food manufacture and requirements to produce safe, nutritious and palatable food. The major prepares students for a wide range of careers in the food and beverage related industries, including food product development, quality assurance, food regulations, research and development, plus management of fresh food supply. Students seeking to be secondary Food Technology teachers are advised to also select a Sub-major in Education Studies in preparation for

Master of Teaching in their fourth year of study. This program will satisfy the requirements of the NSW Institute of Teachers for first teaching areas of 'Food Technology' and 'Biology', with further teaching areas possible in 'chemistry', 'physics', or 'design and technology' depending on the electives selected.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Standard Food Science and Technology Major

Students must complete eight units as follows

300904.1	Advanced Food Science and Technology
300871.1	Culinary Science
300915.1	Food Product Development
300859.1	Food Safety
300883.1	Laboratory Quality Management
300869.1	Postharvest
300922.2	Quality Assurance and Food Analysis

And choose one of

300866.1	Analytical Microbiology
300843.1	Forensic and Environmental Analysis

Food Science and Technology Major for Students undertaking the Education Studies Sub Major

Students must complete eight units as follows, plus be enrolled in the Education Studies Sub Major

300805.1	Food Science 1
300842.2	Food Science 2
300859.1	Food Safety
300869.1	Postharvest
300922.2	Quality Assurance and Food Analysis
300871.1	Culinary Science
300915.1	Food Product Development
300904.1	Advanced Food Science and Technology

Major - Human Nutrition

M3059.1

A major in Human Nutrition investigates healthy eating as a vital part of good health. This major offers a human nutrition specialisation for students enrolled in the Nutrition and Food Science degree. The major covers nutrition and health, with specialised studies in community nutrition, public health nutrition, human physiology, health promotion and food studies. The program aims to develop understanding of human nutrition as it applies to the various stages of life, as well as examining the development of Australian dietary practices and diet related disorders. Students will explore the role of community food systems; developing strategies for social research methods and applications in public health nutrition and health promotion. The major prepares students for careers in community nutrition, health promotion and education, or work in a range of food and nutrition related businesses,

including new product development of healthy foods. Those students' seeking postgraduate studies in dietetics with the objective of becoming an accredited practising dietician should select a double major of 'Nutrition and Physiology' with the 'Human Nutrition' major and complete further studies in metabolism and advanced physiology.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Year 2

Autumn session

300933.1	Nutrition and Health 1
300936.1	Functional Proteins and Genes

Spring session

300934.1	Nutrition and Health 2
300818.1	Introduction to Physiology

Year 3

Autumn session

300928.1	Consumer Issues in Nutrition
300871.1	Culinary Science

Spring session

300908.1	Applied Nutrition
300917.1	Global Nutrition, Food and Community

Major - Medicinal Chemistry

M3060.1

Location

Campus	Mode
Campbelltown Campus	Internal

Specialisation Structure

Note - At least 60 credit points must be at Level 3 or above (two electives/Schedule C units must be at least a Level 3 unit)

Year 2

Autumn session

300936.1	Functional Proteins and Genes
300876.1	Organic Chemistry

One Schedule C Unit

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 234

Spring session

| 300848.1 | Metabolism |
| 300889.1 | Pathological Basis of Disease |

One Schedule C Unit

And one elective

Year 3

Autumn session

| 300891.1 | Advanced Medicinal Chemistry |

One Schedule C Unit

And two electives

Spring session

300893.1	Topics in Medical Science
300920.1	Pharmacological Chemistry
300906.1	Advanced Organic Chemistry

And one Schdule C Unit

Schedule C Units

Choose four of

300907.1	Advanced Inorganic Chemistry
300899.1	Inorganic Chemistry
300925.1	Advanced Analytical Chemistry
300832.1	Analytical Chemistry
300912.1	Molecular Pharmacokinetics
300849.2	Physical Chemistry

Mid Year Intake

Note - At least 60 credit points must be at Level 3 or above (two electives/Schedule C units must be at least a Level 3 unit)

Year 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300811.1	Scientific Literacy

Autumn session

| 300802.1 | Biodiversity |
| 300825.2 | Introduction to Anatomy |

Choose one of

| 300800.2 | Essential Chemistry 1 |
| 300808.2 | Introductory Chemistry |

Choose one of

300830.2	Analysis of Change
300831.2	Quantitative Thinking
300672.2	Mathematics 1A
200263.5	Biometry

Year 2

Spring session

| 300889.1 | Pathological Basis of Disease |

Two Schedule C Unit

And one elective

Autumn session

| 300936.1 | Functional Proteins and Genes |
| 300876.1 | Organic Chemistry |

And two electives

Year 3

Spring session

300848.1	Metabolism
300893.1	Topics in Medical Science
300920.1	Pharmacological Chemistry
300906.1	Advanced Organic Chemistry

Autumn session

| 300891.1 | Advanced Medicinal Chemistry |

Two Schedule C Unit

And one elective

Schedule C Units

300832.1	Analytical Chemistry
300925.1	Advanced Analytical Chemistry
300899.1	Inorganic Chemistry
300849.2	Physical Chemistry
300907.1	Advanced Inorganic Chemistry
300912.1	Molecular Pharmacokinetics

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Major - Anatomy and Physiology

M3061.1

Location

Campus	Mode
Campbelltown Campus	Internal

Specialisation Structure

Note - At least 60 credit points must be at Level 3 or above (two electives/Schedule B units must be at least a Level 3 unit)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 235

Year 2

Autumn session

300936.1	Functional Proteins and Genes
300894.1	Anatomy of the Thorax and Abdomen

One Schedule B Unit

And one elective

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease
300884.1	Pharmacology

And one elective

Year 3

Autumn session

300819.1	Topics in Physiology
300851.1	Advanced Physiology

One Schedule B Unit

And one elective

Spring session

300754.3	Neuroanatomy
300893.1	Topics in Medical Science

One Schedule B Unit

And one elective

Schedule B Units

Choose three of

300905.1	Advanced Immunology
300898.2	Appendicular Skeleton
300817.1	Molecular Biology
300897.1	Anatomy of the Head and Neck
300838.1	Comparative Physiology
300927.2	Molecular Medicine
300845.1	Genetics
300820.1	Genes, Genomics and Human Health

Mid Year Intake

Year 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300811.1	Scientific Literacy

Autumn session

300936.1	Functional Proteins and Genes
300825.2	Introduction to Anatomy

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Choose one of

300830.2	Analysis of Change
300831.2	Quantitative Thinking
300672.2	Mathematics 1A
200263.5	Biometry

Year 2

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease
300884.1	Pharmacology

One Schedule B Unit

Autumn session

300802.1	Biodiversity
300894.1	Anatomy of the Thorax and Abdomen

One Schedule B Unit

And one elective

Year 3

Spring session

300893.1	Topics in Medical Science
300754.3	Neuroanatomy

One Schedule B Unit

And one elective

Autumn session

300819.1	Topics in Physiology
300851.1	Advanced Physiology

One Schedule B Unit

And one elective

Schedule B Units

Choose three of

300905.1	Advanced Immunology
300898.2	Appendicular Skeleton
300817.1	Molecular Biology
300897.1	Anatomy of the Head and Neck
300838.1	Comparative Physiology
300927.2	Molecular Medicine
300845.1	Genetics
300820.1	Genes, Genomics and Human Health

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 236

Major - Biomedical Science

M3062.1

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal

Specialisation Structure

Note - At least 60 credit points must be at Level 3 or above (five electives/ Schedule A units must be at least a Level 3 unit)

Year 2

Autumn session

300936.1   Functional Proteins and Genes

Two Schedule A Units
And one elective

Spring session

300848.1   Metabolism
300889.1   Pathological Basis of Disease

One Schedule A Unit
And one elective

Year 3

Autumn session

Three Schedule A Units
And one elective

Spring session

300893.1   Topics in Medical Science

Two Schedule A Units
And one elective

Schedule A Units
Choose eight of

300833.1   Microbiology 1
300896.1   Microbiology 2
300845.1   Genetics
300820.1   Genes, Genomics and Human Health
300826.1   Medical Microbiology
300905.1   Advanced Immunology
300817.1   Molecular Biology
300850.1   Advanced Cell Biology
300866.1   Analytical Microbiology
300927.2   Molecular Medicine
300847.2   Immunology

Mid Year Intake

Note - At least 60 credit points must be at Level 3 or above (five electives/ Schedule A units must be at least a Level 3 unit)

Year 1

Spring session

300816.1   Cell Biology
300803.1   Essential Chemistry 2
300818.1   Introduction to Physiology
300811.1   Scientific Literacy

Autumn session

300802.1   Biodiversity
300825.2   Introduction to Anatomy

Choose one of

300800.2   Essential Chemistry 1
300808.2   Introductory Chemistry

Choose one of

300830.2   Analysis of Change
300831.2   Quantitative Thinking
300672.2   Mathematics 1A
200263.5   Biometry

Year 2

Spring session

300889.1   Pathological Basis of Disease

Three Schedule A Units

Autumn session

300936.1   Functional Proteins and Genes

Two Schedule A Units
And one elective

Year 3

Spring session

300848.1   Metabolism
300893.1   Topics in Medical Science

Two Schedule A Units

Autumn session

Four Schedule A Units

Schedule A Units
Choose eight of

300833.1   Microbiology 1
300896.1   Microbiology 2
300845.1   Genetics
300820.1   Genes, Genomics and Human Health
300905.1   Advanced Immunology
300817.1   Molecular Biology
300850.1   Advanced Cell Biology
300866.1   Analytical Microbiology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 237

300847.2	Immunology
300927.2	Molecular Medicine
300826.1	Medical Microbiology

Mid Year Intake - Alternate pattern

Note - At least 60 credit points must be at Level 3 or above (five electives/ Schedule A units must be at least a Level 3 unit)

Year 1

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology
300811.1	Scientific Literacy

Autumn session

300936.1	Functional Proteins and Genes
300825.2	Introduction to Anatomy

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Choose one of

300830.2	Analysis of Change
300831.2	Quantitative Thinking
300672.2	Mathematics 1A
200263.5	Biometry

Year 2

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease

One Schedule A Unit
And one elective

Autumn session

300802.1	Biodiversity

Two Schedule A Units
And one elective

Year 3

Spring session

300893.1	Topics in Medical Science

Three Schedule A Units

Autumn session

Two Schedule A Units
And two electives

Schedule A Units

Choose eight of

300833.1	Microbiology 1
300896.1	Microbiology 2

300845.1	Genetics
300820.1	Genes, Genomics and Human Health
300905.1	Advanced Immunology
300817.1	Molecular Biology
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology
300847.2	Immunology
300927.2	Molecular Medicine
300826.1	Medical Microbiology

Sub-major elective spaces

Elective units may be used toward obtaining an additional approved sub-major (40 credit points).

Western Sydney University offers sub-majors in a range of areas including Sustainability and Indigenous Studies.

Students can apply for an elective major or sub-major via MySR.

Major - Climate Change

M3078.1

A factual understanding of climate, the components that go to make it up, and how climate has varied in the past, is essential for any person working in the climate change area. This unit will introduce students to the concept of climate, our understanding of how it works, and how it has changed through time. Topics in basic atmospheric science will give students a critical understanding of current environmental concerns and debates about the greenhouse effect and climate change, and the science behind greenhouse gas accounting. Students will be introduced to current atmosphere-related research at Western Sydney University and elsewhere.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 1

300802.1	Biodiversity

Choose one of

300800.2	Essential Chemistry 1
300808.2	Introductory Chemistry

Level 2

300837.1	Climate Change Science
300839.1	Ecology

Choose one of

300865.1	Plant Physiology
300838.1	Comparative Physiology
300980.1	Principles of Evolution

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 238

Level 3

| 300909.1 | Biological Adaptation to Climate Change |
| 300856.1 | Ecosystem Carbon Accounting |

Choose one of

| 300857.1 | Environmental Geochemistry |
| 300855.1 | Conservation Biology |

Major - Conservation Biology

M3079.1

Conservation biology has emerged as a field of study from a synthesis of the ecological, demographic, genetic and societal risks faced by small natural populations. This major equips students with skills in fundamental biology, in the ecology of populations and communities, in population genetics and in the legal conservation framework to enable them to work in this area.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete eight units; up to three of these units can come from level 1, and three must come from level 3.

Level 1

300802.1	Biodiversity
300816.1	Cell Biology
300813.1	Wildlife Studies
300824.1	Management of Aquatic Environments

Level 2

300839.1	Ecology
300845.1	Genetics
300836.1	Botany
300980.1	Principles of Evolution

Level 3

| 300855.1 | Conservation Biology |

And choose two of

300929.1	Aquatic Ecology
300909.1	Biological Adaptation to Climate Change
300861.1	Vertebrate Biodiversity

Major - General Biology

M3080.1

The major in General Biology gives students a broad training in biology, with the opportunity to select a program that ranges across the scale from macro- to micro- to molecular level processes. Completion of the major meets the requirements for secondary school biology teaching (post-graduate study is required to qualify as a teacher).

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 1

| 300802.1 | Biodiversity |
| 300816.1 | Cell Biology |

Choose six of the following units, including at least three units at Level 3.

Level 1

| 300800.2 | Essential Chemistry 1 |
| 300803.1 | Essential Chemistry 2 |

Level 2

300936.1	Functional Proteins and Genes
300848.1	Metabolism
300817.1	Molecular Biology
300847.2	Immunology
300845.1	Genetics
300833.1	Microbiology 1
300896.1	Microbiology 2
300838.1	Comparative Physiology
300839.1	Ecology
300865.1	Plant Physiology
300836.1	Botany
300980.1	Principles of Evolution
300979.1	Principles of Zoology

Level 3

300851.1	Advanced Physiology
300866.1	Analytical Microbiology
300850.1	Advanced Cell Biology
300819.1	Topics in Physiology
300855.1	Conservation Biology
300905.1	Advanced Immunology
300820.1	Genes, Genomics and Human Health
300826.1	Medical Microbiology
300927.2	Molecular Medicine
300929.1	Aquatic Ecology
300861.1	Vertebrate Biodiversity
300918.1	Invertebrate Biology
300924.1	Science Research Project
300883.1	Laboratory Quality Management
300919.1	Occupational Health and Safety

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 239

Major - Marine Biology

M3081.1

Marine environments play vital roles in providing food, water, recreation and other ecosystem services to human society, as well as providing habitat for important species that make up global biodiversity. This major will equip students with the background knowledge and training to work in marine environments, to learn skills in inquiry and problem solving, so that they can contribute beneficially to management and/or conservation of waterways and oceans and the biodiversity within them.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete the following eight units

Level 1

300802.1	Biodiversity
300824.1	Management of Aquatic Environments

Level 2

Choose three of

300838.1	Comparative Physiology
300839.1	Ecology
300979.1	Principles of Zoology
300877.1	Toxicology

Level 3

300929.1	Aquatic Ecology
300909.1	Biological Adaptation to Climate Change

Choose one of

300861.1	Vertebrate Biodiversity
300924.1	Science Research Project
300870.1	Water in the Landscape

Major - Zoology

M3082.1

This major trains students in how to best care for and protect our animals, by covering scientific knowledge of native wildlife, companion animals, and production animals. This major will allow students to develop scientific understanding of how animals function and interact with their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organ systems, as well as structure and function of biomolecules and cells. On-campus animal facilities include those for reptiles, small marsupials, small rodents, horses, sheep

and cattle, as well as over 1000ha of native, rural and aquatic habitats.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 1

Choose two of

300802.1	Biodiversity
300816.1	Cell Biology
300813.1	Wildlife Studies

Level 2

300979.1	Principles of Zoology

Choose two of

300839.1	Ecology
300845.1	Genetics
300838.1	Comparative Physiology
300980.1	Principles of Evolution
300835.1	Animal Reproduction

Level 3

300909.1	Biological Adaptation to Climate Change

Choose two of

300929.1	Aquatic Ecology
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity
300878.1	Animal Behaviour

Major - Environmental Consulting

M3084.1

This major in Environmental Consulting prepares graduates for jobs in environmental consulting companies, government environmental offices, land and water management agencies or non-government organisations. The natural resources boom and growing human population in Australia have created a demand for environmental specialists to conduct and prepare environmental assessments and impact statements. This major will provide you with broad skills in fauna, flora and habitat assessments, as well as, policy and regulation associated with planning and development in Australia.

Location

Campus	Mode
Hawkesbury Campus	Internal

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 240

Specialisation Structure

Students must complete of the following eight units

Level 1

300813.1	Wildlife Studies
200571.4	Management Dynamics

Choose one of

300831.2	Quantitative Thinking
200263.5	Biometry

Level 2

300841.1	Environmental Regulation and Policy

Level 3

300858.1	Environmental Risk Management
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity

Choose one of

300924.1	Science Research Project
300914.1	Field Project 2

Major - Nutrition and Physiology

M3089.1

This major addresses the physiological and nutritional foundations for understanding the nature of food and the physiological and epidemiological relationships between food, nutrients and components of food and common diet-related diseases prevalent in Australia. The study of nutrition and human physiology incorporates knowledge of the human biology and biochemistry to understand how the body utilizes nutrients and related substances for optimal health throughout the lifecycle. This major is recommended for students seeking an in-depth understanding of diet-related health issues and are intending to work in allied or community health, education, or seeking postgraduate studies in nutrition, dietetics or public health.

Location

Campus	Mode
Bankstown Campus	External
Bankstown Campus	Internal
Campbelltown Campus	External
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	External
Parramatta Campus	Internal
Penrith Campus	External
Penrith Campus	Internal

Specialisation Structure

Students must complete the following units

Level 2

300936.1	Functional Proteins and Genes
300848.1	Metabolism
300933.1	Nutrition and Health 1
300934.1	Nutrition and Health 2

Level 3

300851.1	Advanced Physiology
300819.1	Topics in Physiology

Choose two of the following

300908.1	Applied Nutrition
300917.1	Global Nutrition, Food and Community
300928.1	Consumer Issues in Nutrition

Major - Biochemistry and Molecular Biology

M3090.1

This major will equip students with knowledge and skills in fundamental biology and chemistry, biochemistry and molecular biology to allow students to enter industrial or research-based employment in this area (biotech companies, pathology, quality assurance, university and hospital labs and scientific sales, government policy analysis). As this area has expanding knowledge and technologies, outcomes also include the ability to read, critique and evaluate emerging research with the view to becoming a life-long learner in the field. The outcomes of this major would support honours or masters level research in this area.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Three units must be at Level 3

Level 1

300816.1	Cell Biology
300803.1	Essential Chemistry 2

Level 2

300936.1	Functional Proteins and Genes
300848.1	Metabolism

Choose one of the following

300817.1	Molecular Biology
300847.2	Immunology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 241

300845.1   Genetics

Level 3

Choose three of the following

300927.2   Molecular Medicine
300820.1   Genes, Genomics and Human Health
300905.1   Advanced Immunology
300850.1   Advanced Cell Biology

Major - Medicinal Chemistry

M3094.1

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal

Specialisation Structure

Students completing the Bachelor of Medical Science (Advanced) with a major in Medicinal Chemistry will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above (one Schedule C unit must be at least a Level 3 unit)

Year 1

Autumn session

300802.1   Biodiversity
300811.1   Scientific Literacy
300825.2   Introduction to Anatomy

Choose one of

300800.2   Essential Chemistry 1
300808.2   Introductory Chemistry

Spring session

300816.1   Cell Biology
300803.1   Essential Chemistry 2
300818.1   Introduction to Physiology

Choose one of

300830.2   Analysis of Change
300831.2   Quantitative Thinking
300672.2   Mathematics 1A
200263.5   Biometry

Year 2

Autumn session

300936.1   Functional Proteins and Genes
300937.1   Advanced Science Project A
300876.1   Organic Chemistry

One Schedule C Unit

Spring session

300848.1   Metabolism
300889.1   Pathological Basis of Disease
300938.1   Advanced Science Project B

One Schedule C Unit

Year 3

Autumn session

300891.1   Advanced Medicinal Chemistry
300910.1   Advanced Science Project C
300893.1   Topics in Medical Science

One Schedule C Unit

Spring session

300920.1   Pharmacological Chemistry
300906.1   Advanced Organic Chemistry
300892.1   Medical Science Project

One Schedule C Unit

Schedule C Units

Choose four of

300907.1   Advanced Inorganic Chemistry
300899.1   Inorganic Chemistry
300925.1   Advanced Analytical Chemistry
300832.1   Analytical Chemistry
300912.1   Molecular Pharmacokinetics
300849.2   Physical Chemistry

Major - Anatomy and Physiology

M3095.1

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal

Specialisation Structure

Students completing the Bachelor of Medical Science (Advanced) with a major in Anatomy and Physiology will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above (one Schedule B unit must be at least a Level 3 unit)

Year 1

Autumn session

300802.1   Biodiversity
300811.1   Scientific Literacy
300825.2   Introduction to Anatomy

Choose one of

300800.2   Essential Chemistry 1
300808.2   Introductory Chemistry

Spring session

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 242

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology

Choose one of

300830.2	Analysis of Change
300831.2	Quantitative Thinking
300672.2	Mathematics 1A
200263.5	Biometry

Year 2

Autumn session

300936.1	Functional Proteins and Genes
300894.1	Anatomy of the Thorax and Abdomen
300937.1	Advanced Science Project A

And one Schedule B Unit

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease
300938.1	Advanced Science Project B
300884.1	Pharmacology

Year 3

Autumn session

300819.1	Topics in Physiology
300851.1	Advanced Physiology
300910.1	Advanced Science Project C
300893.1	Topics in Medical Science

Spring session

| 300754.2 | Neuroanatomy |
| 300892.1 | Medical Science Project |

Two Schedule B Units

Schedule B Units
Choose three of

300905.1	Advanced Immunology
300898.2	Appendicular Skeleton
300817.1	Molecular Biology
300897.1	Anatomy of the Head and Neck
300838.1	Comparative Physiology
300927.2	Molecular Medicine
300845.1	Genetics
300820.1	Genes, Genomics and Human Health

Major - Biomedical Science

M3096.1

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal

Specialisation Structure

Students completing the Bachelor of Medical Science (Advanced) with a major in Biomedical Science will complete the following course structure.

Note: At least 60 credit points must be at Level 3 or above (four Schedule A units must be at least a Level 3 unit)

Year 1

Autumn session

300802.1	Biodiversity
300811.1	Scientific Literacy
300825.2	Introduction to Anatomy

Choose one of

| 300800.2 | Essential Chemistry 1 |
| 300808.2 | Introductory Chemistry |

Spring session

300816.1	Cell Biology
300803.1	Essential Chemistry 2
300818.1	Introduction to Physiology

Choose one of

300830.2	Analysis of Change
300831.2	Quantitative Thinking
300672.2	Mathematics 1A
200263.5	Biometry

Year 2

Autumn session

| 300936.1 | Functional Proteins and Genes |
| 300937.1 | Advanced Science Project A |

Two Schedule A Units

Spring session

300848.1	Metabolism
300889.1	Pathological Basis of Disease
300938.1	Advanced Science Project B

One Schedule A Unit

Year 3

Autumn session

| 300910.1 | Advanced Science Project C |
| 300893.1 | Topics in Medical Science |

Two Schedule A Units

Spring session

| 300892.1 | Medical Science Project |

Three Schedule A Units

Schedule A Units
Choose eight of

| 300833.1 | Microbiology 1 |
| 300896.1 | Microbiology 2 |

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 243

300845.1	Genetics
300820.1	Genes, Genomics and Human Health
300826.1	Medical Microbiology
300905.1	Advanced Immunology
300817.1	Molecular Biology
300850.1	Advanced Cell Biology
300866.1	Analytical Microbiology
300927.2	Molecular Medicine
300847.2	Immunology

Major - Microbiology

M3099.1

Microorganisms impact on all aspects of our lives. A major in microbiology will equip students with the skills and knowledge of microbiology and molecular microbiology relevant to employment in research laboratories and industries including biotechnology companies, medical and environmental laboratories, food, wine and pharmaceutical companies, quality assurance and scientific sales. The major, which includes the study of bacteria, fungi, protists and viruses and their roles in medicine, industry and the environment, will also provide a foundation for research at Honours and postgraduate levels.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 2

300936.1	Functional Proteins and Genes
300833.1	Microbiology 1
300896.1	Microbiology 2
300817.1	Molecular Biology

Level 3
Choose four of

300866.1	Analytical Microbiology
300826.1	Medical Microbiology
300905.1	Advanced Immunology
300883.1	Laboratory Quality Management
300924.1	Science Research Project

Major - Forensic Chemistry

M3100.1

This major gives a systematic introduction to the principles and practice of forensic chemistry. Forensic chemistry is the science underlying many forensic investigations from the analysis of toxic material to the detection and identification of illicit drug use. Forensic chemistry also forms the basis of a large portion of the techniques used at the crime scene. This major is designed to complement a science-based degree, but it may also be taken by students who are studying a different discipline or profession as all pre-requisites are included.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete eight units as follows

Level 1

300800.2	Essential Chemistry 1

Or

300808.2	Introductory Chemistry

Note: Only one chemistry unit may be chosen. Choose 300800 - Essential Chemistry OR 300803 - Introductory Chemistry.

300803.1	Essential Chemistry 2
300806.1	Forensic Science

Level 2

300843.1	Forensic and Environmental Analysis
300935.2	Evidence and Crime Scene Management

Level 3

300868.1	Forensic Chemistry
300981.1	Environmental Forensic Investigations
300883.1	Laboratory Quality Management

Major - Therapeutic Recreation

M4000.1

Specialisation Structure

Students must complete the following eight units

400249.2	Ethical and Legal Issues in Health Care
400244.2	Introduction to Leisure and Recreation Theory
400789.3	Leisure Education Programming and Mental Health
400968.2	Professional Practice in Aged Care and Disability
400786.2	Professional Transition Project
400254.2	Therapeutic Recreation Professional Project
400246.4	Workplace Learning 1 (Therapeutic Recreation)
400252.3	Workplace Learning 2 (Community Placement)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 244

Major - Health Promotion

M4001.1

Specialisation Structure
Students must complete the following eight units

400249.2	Ethical and Legal Issues in Health Care
400275.2	Health Planning Project
401195.1	Health Politics, Policy and Planning
400784.3	Health Promotion Practice 1
400785.2	Health Promotion Practice 2
400286.3	Injury Prevention
400786.2	Professional Transition Project
400285.2	Public Health

Major - Health Services Management

M4002.1

Specialisation Structure
Students must complete the following eight units

400249.2	Ethical and Legal Issues in Health Care
400275.2	Health Planning Project
401195.1	Health Politics, Policy and Planning
400279.4	Health Services Financial Management
400277.4	Health Services Management
400787.2	Health Services Management Practice
400788.3	Health Services Workforce Management
400786.2	Professional Transition Project

Major - Environmental Consulting

M4011.1

This major in Environmental Consulting prepares graduates for jobs in environmental consulting companies, government environmental offices, land and water management agencies or non-government organisations. The natural resources boom and growing human population in Australia have created a demand for environmental specialists to conduct and prepare environmental assessments and impact statements. This major will provide you with broad skills in fauna, flora and habitat assessments, as well as, policy and regulation associated with planning and development in Australia.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure
Students must complete the following eight units

Level 1

300813.1	Wildlife Studies
200912.1	Enterprise Leadership

Choose one of

300831.2	Quantitative Thinking
200263.5	Biometry

Level 2

300841.1	Environmental Regulation and Policy

Level 3

300858.1	Environmental Risk Management
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity

Choose one of

300924.1	Science Research Project
300914.1	Field Project 2

Major - Crime Scene Investigation

M4012.1

This major reinforces the knowledge and practical skills required for crime scene investigation as a core forensic science discipline. It draws on key forensic science concepts such as evidence integrity and continuity, case file management, and the interpretation and presentation of forensic information. After completion of the major, students will be able to correctly document crime scenes through photography, note taking and diagrams, collect and analyse potential forensic evidence, interpret data from observations and scientific analyses, and present findings through written reports. As well as crime scene investigation, the major provides students with a solid grounding across a range of forensic science disciplines that include forensic biology, forensic chemistry and forensic anthropology.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure
Students must complete eight units as follows

Level 1

300806.1	Forensic Science
300874.1	Digital Forensic Photography

Level 2

300873.2	Crime Scene Investigation

Choose one of

300843.1	Forensic and Environmental Analysis
401171.1	Imaging Science

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 245

SCHOOL OF SCIENCE AND HEALTH

Level 3
Select four of

300981.1	Environmental Forensic Investigations
300868.1	Forensic Chemistry
301120.1	Forensic Anthropology
300911.1	Complex Forensic Studies
401170.1	Forensic Biology

Major - Applied Finance

MT2021.1

The Applied Finance major equips you with the expert skills to create a career as a finance specialist. In this major you will develop in-depth knowledge of finance with a focus on investment and securities, economics, and banking and finance. The core units in the Bachelor of Business will provide you a foundation of business knowledge and develop your skills in innovation, career planning, and numeracy. The Applied Finance major builds on this knowledge and skills in an applied discipline based context. Finance specialists work in a range of roles within the rapidly growing finance sector. This major fulfils the educational requirements for admission as an Associate (A Fin) of the Financial Services Institute of Australasia (FINSIA) provided the applicant is at least working in the financial services industry. All other students are eligible to apply for Affiliate membership (no postnominals apply).

Location

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200048.2	Financial Institutions and Markets
200488.4	Corporate Financial Management
200819.1	Investment Management
200916.1	Economic and Financial Modelling
200055.5	International Finance
200818.1	Bank Management
200079.3	Derivatives
200921.1	Security Analysis and Business Valuation

Professional Units for Careers in Money

Students undertaking the Applied Finance major are advised to take the following four units to satisfy the requirements for their professional core:

200914.1	Working in Professions
200917.1	Innovation, Enterprise and Society
200537.4	Economics and Finance Engagement Project

Choose one of

200032.5	Statistics for Business
200052.5	Introduction to Economic Methods

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Applied Finance requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autum session

200909.1	Enterprise Law
200910.1	Financing Enterprises
200048.2	Financial Institutions and Markets

Choose one of

200032.5	Statistics for Business
200052.5	Introduction to Economic Methods

Spring session

200912.1	Enterprise Leadership
200488.4	Corporate Financial Management
200911.1	Enterprise Innovation and Markets

And one elective

Year 2

Autumn session

200819.1	Investment Management
200914.1	Working in Professions

And two electives

Spring session

200916.1	Economic and Financial Modelling
200055.5	International Finance

And two electives

Year 3

Autumn session

200818.1	Bank Management
200079.3	Derivatives
200917.1	Innovation, Enterprise and Society

And one elective

Spring session

200921.1	Security Analysis and Business Valuation

Enterprise Engaged Unit:

200537.4	Economics and Finance Engagement Project

And two electives

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 246

Part-time

Year 1

Autumn session

200909.1	Enterprise Law
200048.2	Financial Institutions and Markets

Spring session

200911.1	Enterprise Innovation and Markets
200910.1	Financing Enterprises

Year 2

Autumn session

200488.4	Corporate Financial Management

Choose one of

200052.5	Introduction to Economic Methods
200032.5	Statistics for Business

Spring session

200912.1	Enterprise Leadership

And one elective

Year 3

Autumn session

200819.1	Investment Management

And one elective

Spring session

200914.1	Working in Professions

And one elective

Year 4

Autumn session

200055.5	International Finance

And one elective

Spring session

200916.1	Economic and Financial Modelling

And one elective

Year 5

Autumn session

200818.1	Bank Management
200917.1	Innovation, Enterprise and Society

Spring session

200079.3	Derivatives

And one elective

Year 6

Autumn session

Enterprise Engaged Unit:

200537.4	Economics and Finance Engagement Project

And one elective

Spring session

200921.1	Security Analysis and Business Valuation

And one elective

Summer Pathway

To be advised

Major - Economics

MT2022.1

The Economics major provides a broad pluralist perspective on fundamental aspects of relationships between individuals, firms, institutions and countries. Students will learn how economies function and how public policy and the way organisations behave affect diverse social, economic and environmental problems. Students are introduced to a wide array of competing economic theories, so that they are critically informed about the ways in which they can transform the world. A major in Economics prepares students to be active participants in addressing the wide range of problems faced by governments, social organisations and the business community in the domestic and international economies. Students who study economics can expect to develop their analytical and problem solving skills and to be intellectually challenged, whether they view the discipline as providing specific vocational skills or as an area of academic and intellectual interest to them. An Economics major is very highly regarded in the business world and opens up a very large range of career prospects in general business, finance and the public sector.

Location

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure

Qualification for the Economics Major requires the successful completion of 80 credit points including all of the core Units listed below.

Core Units for this Major

200922.1	Consumers, Firms and Markets
200924.1	Cost Benefit Analysis
200926.1	Macroeconomic Measures and Models
200925.1	Growth, Cycles and Crises
200923.1	Corporations, Economic Power and Policy
200916.1	Economic and Financial Modelling
200815.2	Globalisation and Sustainability
200549.2	The Australian Macroeconomy

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 247

Professional Units for Careers in Money

Students undertaking the Economics major are advised to take the following four units to satisfy the requirements for their professional core:

200914.1   Working in Professions
200917.1   Innovation, Enterprise and Society
200537.4   Economics and Finance Engagement Project

Choose one of

200032.5   Statistics for Business
200052.5   Introduction to Economic Methods

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Economics requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200909.1   Enterprise Law
200910.1   Financing Enterprises
200922.1   Consumers, Firms and Markets

Choose one of

200032.5   Statistics for Business
200052.5   Introduction to Economic Methods

Spring session

200549.2   The Australian Macroeconomy
200912.1   Enterprise Leadership
200911.1   Enterprise Innovation and Markets

And one elective

Year 2

Autumn session

200924.1   Cost Benefit Analysis
200914.1   Working in Professions

And two electives

Spring session

200916.1   Economic and Financial Modelling
200926.1   Macroeconomic Measures and Models

And two electives

Year 3

Autumn session

200815.2   Globalisation and Sustainability
200923.1   Corporations, Economic Power and Policy
200917.1   Innovation, Enterprise and Society

And one elective

Spring session

200925.1   Growth, Cycles and Crises

Enterprise Engaged Unit:

200537.4   Economics and Finance Engagement Project

And two electives

Part-time

Year 1

Autumn session

200909.1   Enterprise Law
200911.1   Enterprise Innovation and Markets

Spring session

200910.1   Financing Enterprises
200922.1   Consumers, Firms and Markets

Year 2

Autumn session

200549.2   The Australian Macroeconomy

Choose one of

200032.5   Statistics for Business
200052.5   Introduction to Economic Methods

Spring session

200912.1   Enterprise Leadership

And one elective

Year 3

Autumn session

200924.1   Cost Benefit Analysis

And one elective

Spring session

200914.1   Working in Professions

And one elective

Year 4

Autumn session

200926.1   Macroeconomic Measures and Models

And one elective

Spring session

200916.1   Economic and Financial Modelling

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 248

Year 5

Autumn session

200815.2	Globalisation and Sustainability
200917.1	Innovation, Enterprise and Society

Spring session

200530.3	Microeconomic Theory and Applications

And one elective

Year 6

Autumn session

Enterprise Engaged Unit:

200537.4	Economics and Finance Engagement Project

And one elective

Spring session

200925.1	Growth, Cycles and Crises

And one elective

Summer Pathway

To be advised

Major - Hospitality Management

MT2023.1

The Hospitality Management major is designed to prepare you for a career that goes beyond providing customer 'service' and focuses on providing customer 'experience'. This major equips you with the expert skills required to effectively and efficiently manage hotels, resorts, clubs, food-service enterprises or other service-oriented businesses. The Hospitality Management major units focus on hospitality operations management, planning and design of hospitality facilities, and business management, with opportunities to undertake industry-related projects. Hospitality Management leads to exciting and varied careers across a range of local and international sectors.

Location

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200273.5	Managing Service and Experience
200710.3	Managing the Food and Beverage Experience
200709.2	Managing the Accommodation Experience

200584.3	Hospitality Management Operations
200742.2	Sport and Hospitality Event Management
200708.2	Hospitality Industry
200707.3	Service Industry Studies
200148.2	Planning and Design of Hospitality Facilities

Professional Units for Careers in Markets

Students undertaking the Hospitality Management major are advised to take the following four units to satisfy the requirements for their professional core:

200915.1	The Service Enterprise
200032.5	Statistics for Business
200918.1	Design Thinking for Creativity
200561.3	Hospitality Management Applied Project

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Hospitality Management requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership
200710.3	Managing the Food and Beverage Experience
200032.5	Statistics for Business

Spring session

200909.1	Enterprise Law
200910.1	Financing Enterprises
200709.2	Managing the Accommodation Experience

And one elective

Year 2

Autumn session

200915.1	The Service Enterprise
200707.3	Service Industry Studies

And two electives

Spring session

200742.2	Sport and Hospitality Event Management
200584.3	Hospitality Management Operations
200918.1	Design Thinking for Creativity

And one elective

Year 3

Autumn session

200273.5	Managing Service and Experience
200708.2	Hospitality Industry

And two electives

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 249

Spring session

200148.2   Planning and Design of Hospitality Facilities

Enterprise Engaged Unit:

200561.3   Hospitality Management Applied Project

And two electives

Part-time

Year 1

Autumn session

200911.1   Enterprise Innovation and Markets
200909.1   Enterprise Law

Spring session

200910.1   Financing Enterprises
200032.5   Statistics for Business

Year 2

Autumn session

200710.3   Managing the Food and Beverage Experience
200709.2   Managing the Accommodation Experience

Spring session

200912.1   Enterprise Leadership

And one elective

Year 3

Autumn session

200915.1   The Service Enterprise

And one elective

Spring session

200742.2   Sport and Hospitality Event Management

And one elective

Year 4

Autumn session

200707.3   Service Industry Studies

And one elective

Spring session

200584.3   Hospitality Management Operations
200148.2   Planning and Design of Hospitality Facilities

Year 5

Autumn session

200708.2   Hospitality Industry

And one elective

Spring session

200918.1   Design Thinking for Creativity

And one elective

Year 6

Autumn session

200273.5   Managing Service and Experience

And one elective

Spring session

Enterprise Engaged Unit:

200561.3   Hospitality Management Applied Project

And one elective

Summer Pathway
To be advised

Major - Human Resource Management

MT2024.1

The Human Resource Management Major is designed for people who seek careers in human resource management and industrial relations. Graduates' careers focus on enhancing the value of human and social capital through supporting employee engagement for many different kinds of organisations, market-oriented and community-oriented organisations and many kinds of people. The teaching philosophy is based on knowledge in action, a fusion of the Australia Human Resource Institute's capabilities for HR professionals and the Western Sydney University Graduate Attributes designed to secure success. An aim of the program is to instil those values and attitudes that can support leaders in judgements about balancing the pursuit of organisational objectives with creating opportunities for developing people's capacities and careers. The perspectives are local and international, with an emphasis on the value of cultural and demographic diversity. Graduates have knowledge of how leadership and management of people can support organisational objectives and create organisational opportunities. This capacity comes from grounding in human resource management and industrial relations practice using contemporary law and research in applied projects. Students combine this with an education in the pressures organisations experience in inter-disciplinary subjects focused on money, markets and management. That is, graduates develop commercial acumen and appreciate the competing interests around work, aware of trends locally and internationally. Throughout the program, students are challenged to develop and demonstrate communication, cultural, and analytic skills required to be innovative and responsible team-members and leaders.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 250

Location

Campus	Mode
Bankstown Campus	Internal
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core Units listed below.

Core Units for this Major

200300.2	Managing People at Work
200614.2	Enterprise Industrial Relations
200859.1	Human Resource Development
200621.3	International Human Resource Management
200739.2	Reward and Performance Management
200613.2	Negotiation, Bargaining and Advocacy
200860.1	People, Work and Society
200740.3	Human Resource and Industrial Relations Strategy

Professional Units for Careers in Management

Students undertaking the Human Resource Management major are advised to take the following four units to satisfy the requirements for their professional core:

200376.3	Managing and Developing Careers
301123.1	Management Analytics
200919.1	Innovation and Professional Practice
200575.3	Processes and Evaluation in Employment Relations

Note: Students enrolled in MT2024 Human Resource Management are advised that the enterprise engaged unit 200575 Processes and Evaluation in Employment Relations is required for accreditation purposes.

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Human Resource Management requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership
200909.1	Enterprise Law
200300.2	Managing People at Work

Spring session

200911.1	Enterprise Innovation and Markets
200859.1	Human Resource Development
301123.1	Management Analytics

And one elective

Year 2

Autumn session

200614.2	Enterprise Industrial Relations
200621.3	International Human Resource Management

And two electives

Spring session

200739.2	Reward and Performance Management
200376.3	Managing and Developing Careers

And two electives

Year 3

Autumn session

200860.1	People, Work and Society
200613.2	Negotiation, Bargaining and Advocacy
200919.1	Innovation and Professional Practice

And one elective

Spring session

200740.3	Human Resource and Industrial Relations Strategy

Enterprise Engaged Unit:

200575.3	Processes and Evaluation in Employment Relations

And two electives

Part-time

Year 1

Autumn session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership

Spring session

301123.1	Management Analytics
200911.1	Enterprise Innovation and Markets

Year 2

Autumn session

200909.1	Enterprise Law
200300.2	Managing People at Work

Spring session

200859.1	Human Resource Development

And one elective

Year 3

Autumn session

200614.2	Enterprise Industrial Relations

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 251

And one elective

Spring session

200376.3   Managing and Developing Careers

And one elective

Year 4

Autumn session

200621.3   International Human Resource Management

And one elective

Spring session

200739.2   Reward and Performance Management

And one elective

Year 5

Autumn session

200860.1   People, Work and Society

And one elective

Spring session

200919.1   Innovation and Professional Practice

And one elective

Year 6

Autumn session

200613.2   Negotiation, Bargaining and Advocacy

And one elective

Spring session

200740.3   Human Resource and Industrial Relations
Strategy

Enterprise Engaged Unit:

200575.3   Processes and Evaluation in Employment
Relations

Summer Pathway
To be advised

Major - International Business

MT2025.1

The global economy is becoming increasingly important for
organisations seeking out new opportunities to expand their
customer base and develop partnerships. Managers who
are well versed in the needs of doing business
internationally and who can exploit these opportunities will
therefore play an integral role in any such corporation.
Building on a solid foundation in domestic business
education, including global sustainability, international

business strategy, managing in a global environment, and
international marketing, this major equips graduates with
the detailed knowledge of the international dimension of
business and the necessary understanding of the workings
of that market system.

Location

Campus	Mode
Parramatta Campus	Internal

Specialisation Structure
Qualification for this Major requires the successful
completion of 80 credit points including all of the core units
listed below.

Core Units for this Major

200591.2	Introduction to International Business
200864.1	Managing in the Global Environment
200815.2	Globalisation and Sustainability
200589.2	Export Strategy and Applications
200098.3	The Markets of Asia
200094.4	International Marketing
200863.1	Leadership and Entrepreneurship
200626.2	International Business Strategy

Professional Units for Careers in Markets
Students undertaking the International Business major are
advised to take the following four units to satisfy the
requirements for their professional core:

200915.1	The Service Enterprise
200032.5	Statistics for Business
200918.1	Design Thinking for Creativity
200590.2	International Business Project

Recommended Sequence
Qualification for the award of Bachelor of Business with a
major in International Business requires the successful
completion of 240 credit points as per the recommended
sequence below.

Full-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership
200591.2	Introduction to International Business
200032.5	Statistics for Business

Spring session

200909.1	Enterprise Law
200910.1	Financing Enterprises
200864.1	Managing in the Global Environment

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 252

Year 2

Autumn session

200915.1   The Service Enterprise
200815.2   Globalisation and Sustainability

And two electives

Spring session

200589.2   Export Strategy and Applications
200098.3   The Markets of Asia

And two electives

Year 3

Autumn session

200094.4   International Marketing
200918.1   Design Thinking for Creativity
200863.1   Leadership and Entrepreneurship

And one elective

Spring session

200626.2   International Business Strategy

Enterprise Engaged Unit:

200590.2   International Business Project

And two electives

Part-time

Year 1

Autumn session

200911.1   Enterprise Innovation and Markets
200909.1   Enterprise Law

Spring session

200910.1   Financing Enterprises
200912.1   Enterprise Leadership

Year 2

Autumn session

200591.2   Introduction to International Business
200032.5   Statistics for Business

Spring session

200864.1   Managing in the Global Environment

And one elective

Year 3

Autumn session

200815.2   Globalisation and Sustainability

And one elective

Spring session

200915.1   The Service Enterprise

And one elective

Year 4

Autumn session

200589.2   Export Strategy and Applications

And one elective

Spring session

200098.3   The Markets of Asia

And one elective

Year 5

Autumn session

200094.4   International Marketing
200863.1   Leadership and Entrepreneurship

Spring session

200918.1   Design Thinking for Creativity

And one elective

Year 6

Autumn session

200626.2   International Business Strategy

And one elective

Spring session

Enterprise Engaged Unit:

200590.2   International Business Project

And one elective

Summer Pathway
To be advised

Major - Management

MT2026.1

The Management major equips you with the expert skills to create a career as a management specialist. You will be prepared to succeed in a range of roles in contemporary private, public, and not-for-profit organisations in Australia and abroad. In this major you will develop strategic management knowledge to enable effective organisational decision making. The units in this major focus on organisational learning and development and behaviour, operations management, leadership and entrepreneurship, change and innovation, and policy. You can look forward to a range of careers in the broad and complex field of management.

SCHOOL OF SCIENCE AND HEALTH

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 253

Location

Campus	Mode
Bankstown Campus	Internal
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200585.4	Organisational Behaviour
200158.4	Business, Society and Policy
200864.1	Managing in the Global Environment
200865.1	Managing Operations
200862.1	Creating Change and Innovation
200863.1	Leadership and Entrepreneurship
200587.2	Strategic Management
200157.3	Organisational Learning and Development

Professional Units for Careers in Management

Students undertaking the Management major are advised to take the following four units to satisfy the requirements for their professional core:

200376.3	Managing and Developing Careers
301123.1	Management Analytics
200919.1	Innovation and Professional Practice
200568.3	Contemporary Management Issues

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Management requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership
200911.1	Enterprise Innovation and Markets
200585.4	Organisational Behaviour

Spring session

200909.1	Enterprise Law
301123.1	Management Analytics
200864.1	Managing in the Global Environment

And one elective

Year 2

Autumn session

200158.4	Business, Society and Policy
200862.1	Creating Change and Innovation

And two electives

Spring session

200865.1	Managing Operations
200157.3	Organisational Learning and Development
200376.3	Managing and Developing Careers

And one elective

Year 3

Autumn session

200863.1	Leadership and Entrepreneurship
200919.1	Innovation and Professional Practice

And two electives

Spring session

200587.2	Strategic Management

Enterprise Engaged Unit:

200568.3	Contemporary Management Issues

And two electives

Part-time

Year 1

Autumn session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership

Spring session

200909.1	Enterprise Law
301123.1	Management Analytics

Year 2

Autumn session

200911.1	Enterprise Innovation and Markets
200585.4	Organisational Behaviour

Spring session

200864.1	Managing in the Global Environment

And one elective

Year 3

Autumn session

200158.4	Business, Society and Policy

And one elective

Spring session

200865.1	Managing Operations

And one elective

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 254

Year 4

Autumn session

200862.1   Creating Change and Innovation

And one elective

Spring session

200376.3   Managing and Developing Careers

And one elective

Year 5

Autumn session

200863.1   Leadership and Entrepreneurship

And one elective

Spring session

200157.3   Organisational Learning and Development

And one elective

Year 6

Autumn session

200919.1   Innovation and Professional Practice

And one elective

Spring session

200587.2   Strategic Management

Enterprise Engaged Unit:

200568.3   Contemporary Management Issues

Summer Pathway
To be advised

Major - Marketing

MT2027.1

Marketing focuses on the exchange process built around understanding and satisfying the needs and wants of customers. Often this is associated as doing business within a highly competitive business environment, yet marketing strategy is also important for government and not-for-profit organisations. This major introduces students to the core concepts of marketing theory, consumer behaviour, marketing communications, brand management, and marketing strategy. Graduates are equipped with the skills for marketing careers in a range of diverse industries across an international platform. This major satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute.

Location

Campus	Mode
Bankstown Campus	Internal
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure
Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200083.2	Marketing Principles
200084.2	Consumer Behaviour
200086.3	Marketing Communications
200088.3	Brand and Product Management
200592.2	Marketing Research
200091.3	Business to Business Marketing
200094.4	International Marketing
200087.3	Strategic Marketing Management

Professional Units for Careers in Markets
Students undertaking the Marketing major are advised to take the following four units to satisfy the requirements for their professional core:

200915.1	The Service Enterprise
200032.5	Statistics for Business
200918.1	Design Thinking for Creativity
200096.3	Marketing Planning Project

Recommended Sequence
Qualification for the award of Bachelor of Business with a major in Marketing requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership
200083.2	Marketing Principles
200032.5	Statistics for Business

Spring session

200910.1	Financing Enterprises
200909.1	Enterprise Law
200084.2	Consumer Behaviour

And one elective

Year 2

Autumn session

200915.1	The Service Enterprise
200086.3	Marketing Communications

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 255

And two electives

Spring session

200088.3	Brand and Product Management
200592.2	Marketing Research

And two electives

Year 3

Autumn session

200091.3	Business to Business Marketing
200918.1	Design Thinking for Creativity
200094.4	International Marketing

And one elective

Spring session

200087.3	Strategic Marketing Management

Enterprise Engaged Unit:

200096.3	Marketing Planning Project

And two electives

Part-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200909.1	Enterprise Law

Spring session

200083.2	Marketing Principles
200032.5	Statistics for Business

Year 2

Autumn session

200912.1	Enterprise Leadership
200084.2	Consumer Behaviour

Spring session

200910.1	Financing Enterprises

And one elective

Year 3

Autumn session

200915.1	The Service Enterprise

And one elective

Spring session

200086.3	Marketing Communications

And one elective

Year 4

Autumn session

200592.2	Marketing Research

And one elective

Spring session

200088.3	Brand and Product Management

And one elective

Year 5

Autumn session

200091.3	Business to Business Marketing

And one elective

Spring session

200918.1	Design Thinking for Creativity

And one elective

Year 6

Autumn session

200094.4	International Marketing
200087.3	Strategic Marketing Management

Spring session

Enterprise Engaged Unit:

200096.3	Marketing Planning Project

And one elective

Summer Pathway
To be advised

Major - Sport Management

MT2029.1

The Sport Management major is designed for people who seek careers in Australian and international Sport management. Specialist units provide students with a capacity to understand and function within the increasingly dedicated context in which sport is played, organised and managed. Students who complete this major will be equipped with the skills and knowledge to manage sport experiences pertaining to globalisation and emerging contemporary issues in sport. Graduates find career employment at all levels of government as well as within the private sector for both commercial and non-commercial organisations. Positions include project management of facilities and events, management and coordination of leisure, sport and civic event departments, sport marketing, player management and sport public relations, elite sport development, sport and leisure programming.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 256

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Qualification for this Major requires the successful completion of 80 credit points including all of the core units listed below.

Core Units for this Major

200705.2	The World of Sport Management
200665.2	Strategic Communication in Sport
200707.3	Service Industry Studies
200742.2	Sport and Hospitality Event Management
200664.2	Sport Management Internship
200754.2	Sports Management - Planning and Development
200273.5	Managing Service and Experience
400335.3	Contemporary Issues in Sport Management

Professional Units for Careers in Markets

Students undertaking the Sport Management major are advised to take the following four units to satisfy the requirements for their professional core:

200915.1	The Service Enterprise
200032.5	Statistics for Business
200918.1	Design Thinking for Creativity
200751.2	Sport Management Applied Project

Recommended Sequence

Qualification for the award of Bachelor of Business with a major in Sport Management requires the successful completion of 240 credit points as per the recommended sequence below.

Full-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200912.1	Enterprise Leadership
200705.2	The World of Sport Management
200032.5	Statistics for Business

Spring session

200910.1	Financing Enterprises
200909.1	Enterprise Law
200665.2	Strategic Communication in Sport

And one elective

Year 2

Autumn session

200915.1	The Service Enterprise
200707.3	Service Industry Studies

And two electives

Spring session

200742.2	Sport and Hospitality Event Management
200664.2	Sport Management Internship
200918.1	Design Thinking for Creativity

And one elective

Year 3

Autumn session

200754.2	Sports Management - Planning and Development
200273.5	Managing Service and Experience

And two electives

Spring session

400335.3	Contemporary Issues in Sport Management

Enterprise Engaged Unit:

200751.2	Sport Management Applied Project

And two electives

Part-time

Year 1

Autumn session

200911.1	Enterprise Innovation and Markets
200909.1	Enterprise Law

Spring session

200910.1	Financing Enterprises
200912.1	Enterprise Leadership

Year 2

Autumn session

200705.2	The World of Sport Management
200032.5	Statistics for Business

Spring session

200665.2	Strategic Communication in Sport

And one elective

Year 3

Autumn session

200915.1	The Service Enterprise

And one elective

Spring session

200742.2	Sport and Hospitality Event Management

And one elective

Year 4

Autumn session

200707.3   Service Industry Studies

And one elective

Spring session

200918.1   Design Thinking for Creativity

And one elective

Year 5

Autumn session

200754.2   Sports Management - Planning and Development

And one elective

Spring session

200664.2   Sport Management Internship

And one elective

Year 6

Autumn session

200273.5   Managing Service and Experience

And one elective

Spring session

400335.3   Contemporary Issues in Sport Management

Enterprise Engaged Unit:

200751.2   Sport Management Applied Project

Summer Pathway
To be advised

Major - Biological Sciences

MT3006.1

Students completing the biological sciences program must follow the course structure for 3677 Bachelor of Science (Biological Science) and enrol in the Specialistaion MT3006 - Biological Science

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Specialisation Structure
Students completing the biological sciences program must follow the course structure for 3677 Bachelor of Science (Biological Science) and enrol in the Specialistaion MT3006 - Biological Science

Major - Chemistry

MT3007.1

Students completing the chemistry program must follow the course structure for 3676 Bachelor of Science (Chemistry) and enrol in the Specialisation MT3007

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure
Students completing the chemistry program must follow the course structure for 3676 Bachelor of Science (Chemistry) and enrol in the Specialisation MT3007

Major - Mathematical Science

MT3008.1

Students completing the mathematical sciences program must follow the course structure for 3679 Bachelor of Science (Mathematical Science) and enrol in the Specialistaion MT3008

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure
Students completing the mathematical sciences program must follow the course structure for 3679 Bachelor of Science (Mathematical Science) and enrol in the Specialistaion MT3008

Sub-major - Education Studies

SM1067.1

The Education Studies sub-major comprises a foundation pool of units which addresses key issues in contemporary educational thinking and practice. Education has a key role to play in bridging the gap between social advantage and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 258

disadvantage, in transforming the lives of individuals and their families and building capacity within communities.

Location

Campus	Mode
Bankstown Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points from the following units

101263.1	Education and Transformation
101663.2	Education for Sustainability
101661.2	Education in a Cosmopolitan Society
101874.3	Experiential Learning in Communities (ELC)
101259.3	Learning and Creativity
101662.1	Young People, Their Futures and Education

Sub-major - Education Studies

SM1100.1

The Education Studies sub-major comprises units from the Learning in Context pool. These units are broadly structured for students to investigate and critique contemporary education issues and are available to all undergraduate students and compulsory for students in the Bachelor of Arts (Pathway to Teaching Secondary) and Bachelor of Science (Pathway to Teaching Secondary).

Location

Campus	Mode
Bankstown Campus	Internal
Parramatta Campus	Internal
Penrith Campus	Internal

Specialisation Structure

Students must complete 40 credit points from the following units

Learning in Context Pool

Level 1 units

102206.1	Experience-based Outdoor Education
101751.2	Contextualising Indigenous Australia (Day Mode)

If choosing a language unit, please choose only one of the following:

100056.2	Chinese 101
100057.2	Chinese 102
100085.2	Japanese 101
100086.2	Japanese 102

Level 2 units

101874.3	Experiential Learning in Communities (ELC)
101263.1	Education and Transformation
101663.2	Education for Sustainability
101259.3	Learning and Creativity
102048.1	Contemporary Childhoods

Level 3 units

101623.1	Ethical Futures
101661.2	Education in a Cosmopolitan Society
102207.1	The Brain and Learning
102210.1	Australia-Asia Education

Sub-major - Food Technology - Secondary Teaching

SM3038.1

The food technology sub-major brings together food science and nutrition with education studies to meet the graduate requirements for teaching in food technology as a second teaching area. This sub-major includes specialised studies in food processing, new food product development, nutrition, contemporary food issues, and the food marketplace relevant to the Australian food industry. The program has strong industry links, well-equipped facilities including food processing pilot plant and modern kitchen facilities.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete four units as follows

Year 1

Spring session

300805.1	Food Science 1

Year 2

Autumn session

300842.2	Food Science 2

Choose two of

Year 2

Autumn session

300933.1	Nutrition and Health 1

Year 2

Spring session

300879.1	Experimental Foods

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 259

Year 3

Autumn session

300871.1	Culinary Science

Year 3

Spring session

300915.1	Food Product Development
300904.1	Advanced Food Science and Technology

Sub-major - Statistics

SM3039.1

This sub-major covers topics in statistics from an introductory level to exploring complex statistical techniques that are used to analyse and interpret data generated in many disciplines. Thus students contemplating honours in any discipline should seriously consider taking this sub-major as part of their undergraduate degree. It is open to all undergraduate students.

Location

Campus	Mode
Campbelltown Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

The Statistics sub-major is available to all undergraduate students except those enrolled in the 3679 Bachelor of Science (Mathematical Science) course.

Students must complete four units as follows

200033.5	Applied Statistics
200037.4	Regression Analysis & Experimental Design
200038.3	Time Series and Forecasting

Choose one of

200263.5	Biometry
200032.5	Statistics for Business
300700.5	Statistical Decision Making

Sub-major - Biochemistry and Molecular Biology

SM3041.1

This sub-major will develop knowledge and skills in biochemistry and molecular biology important in industrial or research-based employment (biotech companies, pathology, quality assurance, university and hospital labs and scientific sales, government policy analysis). Students will read, critique and evaluate research so that they develop independent learning skills and the confidence

needed to deal with the rapid expansion of content in this area of Biology.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

The Biochemistry and Molecular Biology sub-major is available to all undergraduate students except those enrolled in the Biochemistry and Molecular Biology Major.

Students must complete four units as follows

Level 2

300936.1	Functional Proteins and Genes
300848.1	Metabolism
300817.1	Molecular Biology

Level 3

Choose one of

300927.2	Molecular Medicine
300820.1	Genes, Genomics and Human Health

Sub-major - Conservation Biology

SM3042.1

Conservation biology has emerged as a field of study from a synthesis of the ecological, demographic, genetic and societal risks faced by small natural populations. This submajor equips students with skills in fundamental biology, in the ecology of populations and communities, in population genetics and in the legal conservation framework to enable them to work in this area.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

The Conservation Biology sub-major is available to all undergraduate students except those enrolled in the Conservation Biology Major

Students must complete four units as follows

Level 1

Choose one of

300802.1	Biodiversity
300813.1	Wildlife Studies

Level 2

300839.1	Ecology
300845.1	Genetics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 260

<div style="float:right">
</div>

Level 3

300855.1   Conservation Biology

Sub-major - Microbiology

SM3044.1

Microorganisms impact on all aspects of our lives. A microbiology submajor will equip students with the skills and knowledge of microbiology and molecular microbiology relevant to employment in research laboratories and industries including biotechnology companies, medical and environmental laboratories, food, wine and pharmaceutical companies, quality assurance and scientific sales.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

The Microbiology sub-major is available to all undergraduate students except those enrolled in the Microbiology Major.

Students must complete four units as follows

Level 2

300833.1   Microbiology 1
300896.1   Microbiology 2

Level 3

300866.1   Analytical Microbiology
300826.1   Medical Microbiology

Sub-major - Zoology

SM3045.1

This submajor will allow students to develop scientific understanding of how animals function and interact with their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organ systems, as well as down to structure and function of biomolecules and cells.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

The Zoology sub-major is available to all undergraduate students except those enrolled in the Zoology Major.

Students must complete four units as follows

Level 1

300813.1   Wildlife Studies

Level 2

300834.1   Animal Health and Welfare

Level 3

Choose two of

300878.1   Animal Behaviour
300855.1   Conservation Biology
300918.1   Invertebrate Biology
300861.1   Vertebrate Biodiversity

Sub-major - Sustainable Environmental Management

SM3046.1

Solution to environmental problems requires both a technical/scientific 'fix', and an agreed social implementation, or management 'fix'. This submajor covers the essentials of environmental management as an academic discipline, giving students knowledge and skills in the social, legislative and planning frameworks within which environmental practitioners must work to implement solutions to environmental problems.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

The Sustainable Environmental Management sub-major is available to all undergraduate students except those enrolled in the Environmental Management Major.

Students must complete four units as follows

Level 2

300840.1   Environmental Planning and Climate Change
300841.1   Environmental Regulation and Policy

Level 3

300858.1   Environmental Risk Management
300860.1   Urban Environment

Sub-major - Climate Change

SM3048.1

One of the major problems society faces is how to move to an economy and way of life that is sustainable for our planet. This submajor equips students with the skills to address the scientific issues behind global climate change;

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 261

what makes it happen, and how we can reduce or mitigate its impacts on the earth and its biota.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

The Climate Change sub-major is available to all undergraduate students except those enrolled in the Climate Change Major.

Students must complete four units as follows

Level 2

300837.1	Climate Change Science
300840.1	Environmental Planning and Climate Change

Level 3

300909.1	Biological Adaptation to Climate Change
300856.1	Ecosystem Carbon Accounting

Sub-major - Immunology and Cell Biology

SM3049.1

This sub-major will equip students with knowledge and skills in immunology, cell and molecular biology to allow students to enter industrial or research-based employment in this area (biotech companies, pathology, quality assurance, university and hospital labs and scientific sales, government policy analysis). As this area has expanding knowledge and technologies, outcomes also include the ability to read, critique and evaluate emerging research with the view to becoming a life-long learner in the field.

Location

Campus	Mode
Campbelltown Campus	Internal
Hawkesbury Campus	Internal
Parramatta Campus	Internal

Specialisation Structure

Students must complete four units as follows

Level 2

300847.2	Immunology
300817.1	Molecular Biology

Level 3

300850.1	Advanced Cell Biology
300905.1	Advanced Immunology

Sub-major - Physics

SM3050.1

The physics sub-major is designed to provide the basic curriculum for students who have an interest in physics while intending to pursue a degree in some other field. The sub-major offers units that practicing physicists would normally be expected to have studied. Consequently, those who already have in mind a career in teaching,research, industry or education will graduate with a basic, solid preparation in Physics.

Location

Campus	Mode
Campbelltown Campus	Internal

Specialisation Structure

The Physics sub-major is available to all undergraduate students. These are core units from 3674 Bachelor of Medical Science (Nanotechnology).

Students must complete four units as follows

Level 1

300828.1	Physics 1
300829.1	Physics 2

Level 2

300930.1	Classical Physics and Advanced Technologies

Level 3

300923.1	Quantum Physics

Sub-major - Aquatic Environments

SM3062.1

Aquatic and marine environments play vital roles in providing food, water, recreation and other ecosystem services to human society, as well as providing habitat for important species that make up global biodiversity. This submajor will equip students with the background knowledge and training to work in aquatic and marine environments, assess water quality to learn skills in inquiry and problem solving and understand legislation on water, so that they can contribute beneficially to management and/or conservation of waterways and oceans and the biodiversity within them.

Location

Campus	Mode
Hawkesbury Campus	Internal

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 262

Specialisation Structure

The Aquatic Environments sub-major is available to all Western Sydney University undergraduate students except those enrolled in the Aquatic Biology Major

Students must complete the following four units

Level 1

300824.1	Management of Aquatic Environments
300814.1	Water Quality Assessment and Management

Level 3

300978.1	Marine and Aquatic Ecology
300929.1	Aquatic Ecology
300870.1	Water in the Landscape

Sub-major - Zoology

SM3063.1

This sub-major will allow students to develop scientific understanding of how animals function and interact with their environment; from their ecology and evolution; to physiology and biochemistry of tissues and major organ systems, as well as structure and function of biomolecules and cells.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete four units as follows

Level 1

300813.1	Wildlife Studies

Level 2

300980.1	Principles of Evolution

Level 3

Choose two of

300878.1	Animal Behaviour
300855.1	Conservation Biology
300918.1	Invertebrate Biology
300861.1	Vertebrate Biodiversity

Sub-major - Environmental Management

SM3079.1

Solution to environmental problems requires both a technical/scientific 'fix', and an agreed social implementation, or management 'fix'. This sub-major covers environmental management as an academic discipline, giving students knowledge and skills in the social, legislative and planning frameworks within which environmental practitioners must work to implement solutions to environmental problems.

Location

Campus	Mode
Hawkesbury Campus	Internal

Specialisation Structure

Students must complete four units as follows

Level 2

Choose two of the following

300840.1	Environmental Planning and Climate Change
101878.1	Indigenous Landscapes
300875.1	Landuse and the Environment
300841.1	Environmental Regulation and Policy

Level 3

Choose two of the following

300858.1	Environmental Risk Management
300860.1	Urban Environment

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 263

GRADUATE RESEARCH SCHOOL

Bachelor of Research Studies

8083.1

The Master of Research is an internationally recognised qualification which will allow students to be globally mobile in advancing their research education, employment opportunities and pathways to further study. It is designed to increase students' preparedness for PhD studies and ultimately for research-orientated careers.

The first year is comprised of advanced Bachelor level studies exposing students to comprehensive research methodology and advanced disciplinary coursework. Students will develop a research proposal, improve their academic literacy skills and engage with issues associated with research ethics and integrity. In the second year students will undertake a supervised year of higher degree research and produce a Masters thesis. The second year also includes a series of workshops and seminars designed to enhance students' research and professional capabilities.

For domestic students, this program attracts Australian Government funding, packaged as a Bachelor of Research Studies/Master of Research to meet regulations.

In Year 1, domestic students are enrolled in the Bachelor of Research Studies as a Commonwealth supported student and are liable for student contribution amounts which can be deferred through the HECS-HELP scheme if they are eligible. In Year 2, domestic students are enrolled in the Master of Research.

Further information about the Master of Research can be found on the Future Students Research Studies pages

Study Mode
Two years full-time or four years part-time

Location

Campus	Attendance	Mode
Bankstown Campus	Full Time	Internal
Bankstown Campus	Part Time	Internal
Campbelltown Campus	Full Time	Internal
Campbelltown Campus	Part Time	Internal
Hawkesbury Campus	Full Time	Internal
Hawkesbury Campus	Part Time	Internal
Parramatta Campus	Full Time	Internal
Parramatta Campus	Part Time	Internal
Penrith Campus	Full Time	Internal
Penrith Campus	Part Time	Internal

Admission
Admission is determined by the following criteria being met

- A Bachelor's degree or a Master's degree;

- Achievement of a threshold Admission Average Mark (AAM) equal to or above the minimum of 65;

- Demonstrated professional experience in a related discipline to be considered at the discretion of the Dean, Graduate Studies for applicants whose most recent qualification is 5+ years old and

- A statement that outlines a tentative research area.

Additionally for International students an English proficiency requirement of IELTS 6.5 overall (minimum 6.0 in each band) or equivalent.

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and the University

Further information for International students can be found on the website of the International office.

Course Structure
Year 1 of this course will also be studied by International students enrolled in 8084 Master of Research (High Cost) and 8085 Master of Research (Low Cost).

After completion of Year 1, domestic students will be transferred to either 8084 Master of Research (High Cost) or 8085 Master of Research (Low Cost), depending on their research discipline area.

Qualification for the award of Master of Research requires the successful completion of 160 credit points. All students will complete 80 credit points of coursework units and 80 credit points of higher degree by research.

All students must enrol in and complete the 40 credit points of prescribed Core units.

Core units

800166.1	Research Design 1: Theories of Enquiry
800167.1	Research Literacies
800168.1	Research Fields
800169.1	Research Design 2: Practices of Research

Students must also complete

- 40 credit points of discipline-specific Specialisation units (30 credit points within their discipline area and 10 credit points from the other area). The two specialisation discipline areas are Humanities, Arts and Social Sciences (HASS) and Science, Technology, Engineering and Mathematics (STEM), as shown below.

- 80 credit points of higher degree research.

Students may exit with the Bachelor of Research Studies (exit only) after year 1 and the successful completion of 80 credit points, with advanced standing of 160 credit points from their previous undergraduate qualification being granted.

Humanities, Arts and Social Sciences (HASS) Specialisation

Please note: units will be offered subject to demand and availability

200906.1	Bioethics
200907.1	International Environmental Law and Policy
200896.1	Business Analysis Seminars

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 264

200897.1	Advanced Analysis and Interpretation
200898.1	Seminal Papers in Business
800176.1	Internship and Community Engagement (PG)

Education

102166.1	Person-Centred Practice
102158.1	Learning and Teaching in Challenging Contexts
102152.1	Social Ecology
102160.1	Education Policy, Practice and Global Knowledge Co-construction
102159.1	Designing Curriculum Futures
102165.1	At the cultural interface - learning two ways

Creative Writing

102256.1	Idea (Conceiving Experience)
102257.1	Word (Literary Traditions)
102258.1	World (Art and Nature)

Convergent Media

101962.1	Researching Convergent Media

Continental Philosophy

102384.1	Political Philosophy
102380.1	Philosophical Aesthetics
102381.1	Ethics

Creative Arts

102375.1	Research Methods in the Creative Arts
102376.1	Creativity: Theory and Practice
102299.1	Text, Media and Memory
102298.1	The Cutting Edge: Advanced Studies in Humanities and Communication Arts
102339.1	Environmental Humanities
102340.1	Engaging Discursive Fields
102341.1	Debates in Global History
102342.1	In the Realms of the Sensory: Ecologies of Word, Sound and Image
800174.1	Economies and Ecologies
102295.1	Space, Place and the Field
102180.2	Translation from Theory and Research to Policy
102176.1	Theories of Difference and Diversity
102181.2	Nation, Power and Difference

Urban Studies

101633.2	Managing Cities: History and Theory
102069.1	Heritage and Planning
101315.3	Financing Cities in the Global Economy
101634.2	Planning and Environmental Regulation

Development, Security and Sustainability

101895.1	Political Economy of Development
101896.1	Development and Security
101897.1	Development for Equality
101636.2	Developing Sustainable Places

Criminology

102198.1	Transnational Crime

102199.1	Violence, Culture and Criminal Justice
102200.1	Global Criminology and Human Rights

Religion and Society

101897.1	Development for Equality
102202.1	Religion and Law in Contemporary Public Discourse
102201.1	Contemporary Theories of Religion and Society

Science, Technology, Engineering & Mathematics (STEM) Specialisation

Please note: units will be offered subject to demand and availability

301024.1	Advanced Numerical Methods in Engineering
301002.1	Specialised Software Applications
301003.1	Sustainable Systems
301044.1	Data Science
301037.1	Scientific Informatics
800172.1	Quantitative Methods in Neuroscience
800173.1	Cognitive Science: Research and Application
800171.1	Learning and Processing Human Language
800170.1	Ecosystems in a Changing World
400975.1	Ethics in Health Research
401167.1	Applied Research in Health Care
400220.2	Contemporary Professional Practice in Mental Health Nursing
400238.3	Policy, Power and Politics in Health Care Provision
400777.3	Leadership for Quality and Safety in Health Care
400774.2	Perspectives on Nursing
400210.2	Health Promotion and the Nurse
401164.1	Transferable Research Skills
401076.1	Introduction to Epidemiology
401162.1	Experimental Design and Analysis (PG)
401173.1	Introduction to Clinical Epidemiology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 265

Units

101796.1 19th Century American Literature

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit focuses on literature from the American Renaissance through to the end of the Civil War. Issues to be examined will include some of the following: the construction of a national literature, the ideology of American Exceptionalism, the tension between the religious and the secular, and the clash between freedom and slavery. Texts may include fiction, poetry, and drama.

102099.1 20th Century American Literature

Credit Points 10 **Level** 3

Equivalent Units

100845 - American Literature; 100642 - Classic American Literature; 100643 - Modern American Literature; 100506 - American Literature

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit explores twentieth century American literature. Issues to be examined include some of the following: the construction of a national literature, struggles for justice and human rights, the intersection of race, gender and sexuality, the ideology of American Exceptionalism, the rise and fall of 'The American Dream', place and time in American literature. A range of text types will be taught.

400958.1 A Field Study: Comparative Studies of Health Care Delivery

Credit Points 10 **Level** 2

Special Requirements

Students enrolled in this unit will be visiting health care facilities, and may require a criminal record check, and working with children check. Students will need a valid passport and visa that qualify them to travel to the country of study Students will be required to travel as a member in the study group to the country of study. Course charges are available only as a package deal, including accommodation and airfare, travel and health insurance. A deposit is to be paid at the time of registration. In the event of late withdrawal, this deposit is non-refundable.

....

This unit is designed to enable students studying health courses to gain insight into, and develop an understanding of health care delivery and contemporary issues confronting health care in Australia and in the study country in this study-abroad unit.

101882.1 A History of Modern Global Buddhism

Credit Points 10 **Level** 2

Equivalent Units

63120 - Communication and Culture in Asia 2: Performing Asian Cultures and Identities

Incompatible Units

100850 - Buddhism in the Contemporary World

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

A history of Buddhism and its spread through Asian and more recently to the West, introducing its principal beliefs and practices, the diversity of its manifestations, its political, cultural, and social impact. This unit is a history of this current global religion in its social, cultural and political context.

200193.2 Abstract Algebra

Credit Points 10 **Level** 3

Prerequisite

200025.2 Discrete Mathematics

Equivalent Units

14702 - Advanced Algebra, 14383 - Algebra 3

....

This unit develops algebraic thought to a high level. The abstract concepts involved in the main topics (group theory and number theory) have many applications in science and technology, and the unit includes an application to cryptography.

700198.2 Academic Communication 1 (WSTC Prep)

Credit Points 10 **Level** Z

Equivalent Units

700207 - English for Tertiary Study 1 (UWSCFS); 700209 - Introduction to Academic Communication 1 (UWSCFS); 900074 - Academic English 1 (UWSC); 900102 - English for Tertiary Study 1 (UWSC); 900107 - Introduction to Academic Communication 1 (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to introduce students to academic culture as a culture of critical debate and equip students with the academic literacy skills necessary to perform successfully in this culture. In particular, the unit aims to help students access the conventions of academic English by focussing on attitudes to knowledge, and the ways in which ideas are structured and presented in academic texts and speech. The unit assists students to comprehend academic texts, identify key ideas and concepts, and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 266

identify and use the rhetorical moves used in academic texts. It also aims to help students compare and contrast ideas across texts, improve grammatical skills that relate to academic writing, summarise and synthesise information, and understand why, when and how to reference information.

700199.2 Academic Communication 2 (WSTC Prep)

Credit Points 10 **Level** Z

Prerequisite

700198.1 Academic Communication 1 (UWSCFS)

Equivalent Units

700208 - English for Tertiary Study 2 (WSTC Prep); 700210 - Introduction to Academic Communication 2 (WSTC Prep); 900075 - Academic English 2 (WSTC); 900103 - English for Tertiary Study 2 (WSTC); 900108 - Introduction to Academic Communication 2 (WSTC)

Special Requirements

Students must be enrolled at Western Sydney, The College.

....

This unit is designed to expand upon and extend the academic literacy skills acquired in Academic Communication 1. The unit will assist students to develop the skills required to critically read and analyse a variety of texts, and to develop their research and writing skills to produce complex texts. There is a particular focus in this unit on critique and analysis in the process of understanding and producing academic texts.

700056.3 Academic English (WSTC Prep)

Credit Points 10 **Level** Z

Equivalent Units

900021 - Academic English (UWSC); 900073 - Success in Tertiary Literacies (WSTC)

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to improve English proficiency across the four macro skills, of overseas and local students who wish to progress to university studies. In particular, the course aims to help students access the conventions of academic English by focusing on attitudes to knowledge, the ways in which ideas are structured and presented and surface language correctness. In addition, the course encourages students to develop strategies to maximize their learning and to reflect on their own learning styles.

700200.2 Academic Skills for Construction Management (WSTC Prep)

Credit Points 10 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study. Emphasis is placed on developing the key competencies of the business units of the courses, including professional communication, critical reading and writing.

700202.2 Academic Skills for Engineering (WSTC Prep)

Credit Points 10 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study. Emphasis is placed on developing the key competencies of scientific inquiry – collecting, analysing, organising and communicating information as well as solving problems, particularly when related to using mathematical ideas and techniques.

700225.2 Academic Skills for Health Science (WSTC Prep)

Credit Points 10 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study. Emphasis is placed on developing the key competencies of inquiry – analysing, organising, researching and communicating information as well as problem solving.

700205.2 Academic Skills for Information Communications Technology (WSTC Prep)

Credit Points 10 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study. Emphasis is placed on developing the key competencies of scientific inquiry – collecting, analysing, organising and communicating information as well as solving problems, particularly when related to using mathematical ideas and techniques.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 267

Units

700046.3   Accounting Fundamentals (WSTC Prep)

Credit Points 5 **Level** Z

Equivalent Units

700015 - Accounting Fundamentals (UWSCDip); 900010 - Accounting Fundamentals (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

Accounting is the practice of recording, classifying, summarising, analysing and interpreting information of a commercial nature for the purpose of helping people make decisions. In the world of business, the role of accounting is to support management in providing timely and accurate financial information about the business so that informed decisions can be made. Today, many of the accounting processes also known as bookkeeping, are carried out by computers. Various computer programs do the recording, classifying and summarising of data expressed in money terms and the resulting information is then analysed and interpreted by management. Some knowledge and understanding of these processes and the calculations performed by the computer are important so that sense can be made of the information provided by the computer. This unit on Accounting examines some of the basic rules and principles underpinning accounting as well as studying the practical uses of the information supplied through the accounting process.

200101.4   Accounting Information for Managers

Credit Points 10 **Level** 1

Equivalent Units

61111 - Intro Financial Accounting, AC105A - Finance and Accounting, H1746 - Financial and Management Accounting 1, MG324A - Management 3.2, 200103 - Accounting Reports and Decisions

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course or specialisation. Co-requisite 200336 - Business Academic Skills applies to students in courses 2739/2753 Bachelor of Business and Commerce, 2741/2754 Bachelor of Business and Commerce (Advanced Business Leadership) and 2740 Bachelor of Business and Commerce/Bachelor of Laws.

....

This unit provides exposure to financial and management accounting information from a user of accounting information viewpoint. The unit aims to provide breadth of awareness and knowledge in relevant fields of accounting essential to decision making for managers.

700005.4   Accounting Information for Managers (WSTC)

Credit Points 10 **Level** 1

Prerequisite

700046.3 Accounting Fundamentals (WSTC Prep)

Equivalent Units

200101 - Accounting Information for Managers

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. The pre-requisite unit 700046 - Accounting Fundamentals (WSTC Prep) noted above applies to students in courses 7063 Diploma in Business and Commerce, 7059 Diploma in Business and Commerce Extended, 7040 Bachelor of Business and Commerce (UWSC First Year Program), 7064 Bachelor of Business and Commerce (UWSC First Year Program), 7071 Bachelor of Business and Commerce Extended (UWSC First Year Program), 7098 Diploma in Business, 7099 Bachelor of Business (WSTC First Year Program), 7102 Diploma in Business Extended, 7103 Bachelor of Business Extended (WSTC First Year Program), 7065 Diploma in Construction Management Extended and 7081 Bachelor of Construction Management Extended (WSTC First Year Program) only.

....

This unit provides exposure to financial and management accounting information from a user of accounting information viewpoint. The unit aims to provide breadth of awareness and knowledge in relevant fields of accounting essential to decision making for managers.

200534.3   Accounting Information Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Basic financial and management accounting fundamentals, including use of spreadsheets in accounting and the use of a computerised accounting package.

Prerequisite

200116.4 Management Accounting Fundamentals

Equivalent Units

AC202A - Accounting Information Systems, 61141 - Accounting Information Systems, 200114 - Issues in Accounting Information Systems

....

This unit considers the design and implementation of accounting information systems as a data model for resource allocation and management of an organisation. It includes consideration of current trends in information management and the changing regulatory requirements.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 268

101981.1 Activism, Engagement and Social Change

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit is designed for students interested in the processes of politics and social change. Its focus is on the ways in which individual and group interventions and engagement can influence change in both policy and practice in governments and other institutions. We will explore both formal and informal political processes - looking at the interactions of all 'stakeholders', politicians, parties, lobbyists, community advocates and public servants are examined in the context of political theories on ideologies and power.

300954.1 Activity Based Funding/Casemix and Data Quality

Credit Points 10 **Level** 3

Assumed Knowledge

Medical terminology and clinical classification

Prerequisite

300951.2 Clinical Classification and Coding

....

This unit will introduce students to Activity Based Funding and Casemix within the Australian healthcare system. It is designed to cover a variety of casemix classification systems for acute, non-admitted, sub-acute and mental health patients. Attention will be given to Diagnosis Related Groups (DRGs) with specific reference to the Australian Refined Diagnosis Related Groups (AR-DRGs) and the relationship to Activity Based Funding and purchasing models. Measuring performance with activity data and clinical costing methods will be explored. Emphasis will be placed on the impact of data quality as a critical component in achieving excellence in clinical costing, casemix and patient safety.

400873.1 Acupuncture Techniques

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge equivalent to Channels and Points 1 and 2.

Equivalent Units

400350 - Acupuncture 2

Special Requirements

Students must have completed a First Aid Certificate.

....

This unit consolidates and extends students' knowledge of acupuncture theory and practice, and provides further opportunity to develop practical skills. Students are introduced to the theory of point combinations and the development of acupuncture prescriptions and treatment plans. Practical sessions include moxibustion, cupping. This unit also expands upon the student's understanding of the theory and practice principles of traditional Chinese medicine.

200267.2 Advanced Accounting

Credit Points 10 **Level** 3

Prerequisite

200109.4 Corporate Accounting Systems

Equivalent Units

200102 - Accounting Philosophies and Theories, AC304A - Advanced Financial Accounting (V1)

....

This unit addresses the advanced aspects of accounting. Accounting theories are discussed in terms of how they assist us in understanding current accounting practice and accounting standards. In addition, theoretical concepts are applied to current news and real world events.

200897.1 Advanced Analysis and Interpretation

Credit Points 10 **Level** 5

Corequisite

800166.1 Research Design 1: Theories of Enquiry

Special Requirements

Students must be enrolled in course 8083 Bachelor of Research Studies/Master of Research.

....

Building on the introduction to the analysis of qualitative data presented in the core unit Research Design 1: Theories of Enquiry this unit, Advanced Analysis and Interpretation, will provide candidates with the techniques necessary to use, analyse and interpret qualitative data in business research. Presented as a series of seminar-workshops, candidates consider the theories that underpin the employed analytical methods, and then move to employ introduced qualitative software tools to analyse and interpret research data.

300925.1 Advanced Analytical Chemistry

Credit Points 10 **Level** 3

Prerequisite

300832.1 Analytical Chemistry

Equivalent Units

300298 - Analytical Chemistry 3, 300537 - Advanced Chemical Analysis

....

This unit builds on Analytical Chemistry 2 and focuses more on instrumental analysis, isolation and cleanup techniques and aspects of quality control and quality assurance in an analytical laboratory and in manufacturing are discussed. The instrumental methods covered include atomic spectroscopy (for example, atomic absorption and emission, x-ray fluorescence), molecular spectroscopy (for example, UV-Vis, IR, fluorometry, mass spectrometry), chromatography, electrochemistry, thermal methods and

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 269

automated methods. The theory of the instrumental methods, their construction, operation and applications are covered. The theory and application of isolation and cleanup techniques in inorganic and organic residue analysis are given.

200028.3 Advanced Calculus

Credit Points 10 **Level** 2

Prerequisite

300673.1 Mathematics 1B

Equivalent Units

14379 - Advanced Calculus, 14504 - Mathematics 4, J2764 - Mathematics 2.1,

Incompatible Units

200238 - Mathematics for Engineers 2

Special Requirements

Students enrolled in 3621 Bachelor of Engineering or 3664 Bachelor of Engineering Science may not enrol in this unit.

....

This unit is designed for students undertaking studies in mathematics, statistics, operations research and mathematical finance. It provides further mathematical training in the areas of multivariable and vector calculus, which is essential to the understanding of many areas of both pure and applied mathematics.

300850.1 Advanced Cell Biology

Credit Points 10 **Level** 3

Prerequisite

300848.1 Metabolism OR **300936.1** Functional Proteins and Genes OR **300817.1** Molecular Biology OR **300847.1** Immunology

Equivalent Units

300408 - Mammalian Cell Biology and Biotechnology; 300544 - Cell Signalling

Incompatible Units

300223 - Cell Signalling and Molecular Immunology

....

Cells of the body are studied in the context of health and disease, including mechanisms by which cells respond to the environment and integrate in and around tissue. Fundamental cellular processes are discussed that are important in embryonic development, stem cells, haematology and cancer. This unit investigates the action of hormones, growth factors and morphogens; their receptors and signalling pathways and the cellular responses they trigger. This unit covers modern techniques in cell culture, tissue engineering, advanced microscopy and other modern experimental approaches that enable dynamic understanding of live cell function.

300953.1 Advanced Clinical Classification

Credit Points 10 **Level** 3

Prerequisite

300951.2 Clinical Classification and Coding

....

In this unit, the student will be introduced to disease notification and registration procedures. Mortality or cause of death coding will also be examined.Concepts of organising health information in a logical way to interface with an electronic information system will be investigated. The design and role of various health classification systems including the World Health Organizations Family of International Classifications (WHO FIC), specifically ICD 11 and casemix classification systems (e.g. AR DRGs, AN SNAP) will also be discussed. The practical component of this unit will focus on the student further developing their classification skills in the more complex areas of clinical coding including endocrine disorders, specifically diabetes mellitus, circulatory diseases and interventions, genitourinary disorders, specifically chronic kidney disease, obstetrics, paediatrics and congenital anomalies and trauma and procedural complications. The ACS will be applied in detail when classifying from complex discharge summaries and full clinical episodes of care. The student will also be exposed to electronic clinical coding tools that can be used in the classification process.

300586.2 Advanced Computer Science Activities 1

Credit Points 0 **Level** 1

Special Requirements

Students must be enrolled in 3634 Bachelor of Computer Science (Advanced).

....

This unit is only for Bachelor of Computer Science (Advanced) students in year one of their studies. Students will participate in industry and research based extension activities (non-assessable). These activities will be identified with the goal of exposing students early in their degree and integrating them into a culture of academic enquiry, problem solving, knowledge generation and scholarship and an awareness of the challenges and current issues confronting the computing/IT industry. The unit will be used to record student activities and a satisfactory/ unsatisfactory grade will be applied at the end of each semester.

300587.2 Advanced Computer Science Activities 2

Credit Points 0 **Level** 2

Special Requirements

Students must be enrolled in 3634 Bachelor of Computer Science (Advanced).

....

This unit is only for Bachelor of Computer Science (Advanced) students in year two of their studies. Students will participate in industry and research based extension activities (non-assessable). These activities will be identified with the goal of exposing students early in their degree and integrating them into a culture of academic enquiry, problem solving, knowledge generation and scholarship and an awareness of the challenges and current issues confronting the computing/IT industry. The unit will be used to record student activities and a

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 270

satisfactory/ unsatisfactory grade will be applied at the end of each semester.

300588.2 Advanced Computer Science Activities 3

Credit Points 0 **Level** 3

Special Requirements
Students must be enrolled in 3634 Bachelor of Computer Science (Advanced).

....

This unit is only for Bachelor of Computer Science (Advanced) students in year three of their studies. Students will participate in industry and research based extension activities (non-assessable). These activities will be identified with the goal of exposing students early in their degree and integrating them into a culture of academic enquiry, problem solving, knowledge generation and scholarship and an awareness of the challenges and current issues confronting the computing/IT industry. The unit will be used to record student activities and a satisfactory/ unsatisfactory grade will be applied at the end of each semester.

700259.1 Advanced Computer Studies (WSTC Prep)

Credit Points 10 **Level** Z

Assumed Knowledge
Basic competency in the following Microsoft applications: • Access • Creating basic web pages with HTML

Prerequisite
700201.1 Computer Studies (UWSCFS)

Equivalent Units
900076 - Advanced Computer Studies (UWSC)

Special Requirements
Only Western Sydney University, The College students enrolled in Foundation Studies courses can enrol in this unit.

....

This unit has been developed to enhance a student's problem solving skills in the context of software development. Students are introduced to more advanced material in computer studies, including advanced features of Microsoft Access, web page development using HTML and CSS, the fundamentals of Systems Analysis and Design, programming and object-oriented analysis.

300763.1 Advanced Dynamics

Credit Points 10 **Level** 3

Prerequisite
300480.1 Dynamics of Mechanical Systems

Incompatible Units
300009 - Control Systems

....

This unit covers the analysis and control of dynamical behaviour of mechanical systems. It discusses the fundamental principles in controlling mechanical dynamic

systems. In particular, the unit will cover contents in: multi-degree of freedom vibration analysis and modelling; open and closed loop systems; transfer function and state variable methods in mechanical system modelling; concepts of stability; design and analyse control systems using root-locus, bode diagram and state-space methods for mechanical systems.

300969.1 Advanced Engineering Thesis 1: Preliminary Investigations

Credit Points 10 **Level** 5

Special Requirements
Students must be enrolled in 3690 Bachelor of Engineering Advanced (Honours) and have completed 220 credit points with a Grade Point Average 5.0 or above.

....

Advanced Engineering Thesis 1 - Preliminary Investigations unit consists of a research project designed and implemented under the direction of an academic supervisor and research mentor. This unit is the culmination of studies for students who have completed their undergraduate degree and provides substantial training in Preliminary Investigations. Under staff supervision, students are allocated a particular topic for their research, design their own programme of research, and perform the research. The emphasis of this unit is on the application of research knowledge gained in other units to the practical conduct of the individual research project. This unit provides final year Advanced engineering students with the opportunity to undertake research on a specialist topic within their Key Program of undergraduate study.

300970.1 Advanced Engineering Thesis 2: Detailed Investigations

Credit Points 10 **Level** 5

Prerequisite
300969.1 Advanced Engineering Thesis 1: Preliminary Investigations

Special Requirements
Students must be enrolled in 3690 Bachelor of Engineering Advanced (Honours) and have completed 220 credit points with a Grade Point Average 5.0 or above.

....

Advanced Engineering Thesis 2 - Detailed Investigations unit consists of a research project designed and implemented under the direction of an academic supervisor and research mentor. This unit is the culmination of studies for students who have completed their undergraduate degree and provides substantial training in detailed Investigations. Under staff supervision, students are allocated a particular topic for their research, design their own programme of research, and perform the research. The emphasis of this unit is on the application of research knowledge gained in other units and in Engineering Thesis 1 - preliminary Investigations to the practical conduct of the individual research project. This unit provides final year Advanced engineering students with the opportunity to undertake research on a specialist topic within their Key Program of undergraduate study.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 271

300666.2 Advanced Engineering Topic 1

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in course 3666 Bachelor of Engineering (Advanced) or 3690 Bachelor of Engineering Advanced (Honours) and must have a course GPA equal to or greater than 5.5. Students should have achieved at least 160 Credit Points to be able to study the advanced engineering topics in the unit.

....

This unit provides students with the opportunity to tackle challenging engineering problems. They will study advanced topics in selected areas under the supervision of academics. The advanced topics will prepare students for further study and research.

300667.2 Advanced Engineering Topic 2

Credit Points 10 **Level** 4

Prerequisite

300666.2 Advanced Engineering Topic 1

Special Requirements

Students must be enrolled in course 3666 Bachelor of Engineering (Advanced) or 3690 Bachelor of Engineering Advanced (Honours) and must have a course GPA equal to or greater than 5.5.

....

This unit provides students with the opportunity to tackle engineering problems that are more challenging than those in Advanced Engineering Topic 1. They will study advanced topics in selected areas under the supervision of academics. The advanced topics will prepare students for further study and research.

300904.1 Advanced Food Science and Technology

Credit Points 10 **Level** 3

Prerequisite

300842.1 Food Science 2 AND **300922.1** Quality Assurance and Food Analysis

Equivalent Units

300780 - Advanced Food Science and Technology

Incompatible Units

300636 - Food Processing and Analysis, 300641 - Packaging Science and Technology

Special Requirements

Students required to have Personal Protection Equipment e. g. Laboratory coat, safety goggles, enclosed shoes.

....

This unit will extend student understanding of current and emerging food processes and packaging technologies. Students will gain an appreciation of the physicochemical and molecular processes involved in food manufacture and their integration to produce safe, nutritious palatable food. Students will learn to identify likely causes of food spoilage,

become familiar with methods to monitor shelf life kinetics, learn about packaging materials science and be able to select the most appropriate packaging solution for a range of food applications. The environmental impact of food processing and packaging will also be explored, along with the factors affecting the sustainability of food manufacture. Practical workshops will be conducted to produce and analyse food products, plus factory tours to food manufacturing and packaging sites.

300905.1 Advanced Immunology

Credit Points 10 **Level** 3

Prerequisite

300936.1 Functional Proteins and Genes

Equivalent Units

300757 - Molecular Biological of the Immune System

....

The human immune system is a milieu of cells, cytokines, chemokines, growth factors and cell adhesion molecules which form an elaborate molecular communication network through a number of signalling networks and molecules. The relevance of this knowledge for understanding the pathology and specific diseases of the human immune system are emphasised through the unit. This unit also provides an in depth analysis of the molecular mechanisms of cell to cell communication, cell activation, the immunological synapse, transplant rejection (including adoptive transfer experimentation), antigen presentation, B and T cell recruitment and MHC restriction. Medical and diagnostic applications of hybridoma technology, antibody engineering and advances in vaccine development are discussed. The laboratory course will develop technical and interpretative skills in relevant techniques, in particular the ImmunoCAP technology for asthma and allergy diagnosis.

300907.1 Advanced Inorganic Chemistry

Credit Points 10 **Level** 3

Prerequisite

300545.2 Coordination Chemistry OR **300230.2** Inorganic Chemistry 2 OR **300899.1** Inorganic Chemistry

Equivalent Units

J3668 - Inorganic Chemistry 3, 300231 - Inorganic Chemistry 3, 300538 - Advanced Inorganic Chemistry

Special Requirements

Students are required to have laboratory coat, appropriate shoes and eye protection.

....

Building on the foundations laid in Inorganic Chemistry, this unit focuses on structure and bonding in inorganic chemistry, and the stereochemistry of coordination complexes. Spectroscopic and magnetic properties of inorganic compounds are evaluated as a consequence of structure and bonding, and an introduction to X-ray methods for structure determination is given. Kinetics and mechanism of inorganic reactions are examined, and the area of bioinorganic chemistry is developed. Unique structures and reactions of organotransition metal chemistry are explored. Advanced Modules cover aqueous chemistry of cations and oxyanions, inorganic materials,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 272

molecular orbital theory in coordination complexes, group theory; lanthanides and actinides.

300761.1   Advanced Mechanics of Materials

Credit Points 10 **Level** 3

Assumed Knowledge

This subject assumes that the student has undertaken the first and second year studies in UWS engineering courses or equivalent.

Prerequisite

300040.1 Mechanics of Materials

....

Extending upon the unit Mechanics of Materials, this unit will look at what happens when components undergo non-elastic deformation. It will look at how stresses depend on the orientation of the reference axes, and at how materials fail – including creep, fatigue and stress concentrations. It will then look at properties of metals, including alloys and phase diagrams.

300891.1   Advanced Medicinal Chemistry

Credit Points 10 **Level** 3

Prerequisite

300803.1 Essential Chemistry 2

Special Requirements

Successful completion of 40 credit points at Level 2 or 3 in order to enrol this unit.

....

Medicinal Chemistry is an interdisciplinary science that exists at the intersection of chemistry, pharmacology, physiology and human health. Students will explore the multidisciplinary nature and interconnectedness of medicinal chemistry through in-depth study of topics that relate medicinal chemistry to disciplines such as physiology, natural product science, biochemistry and pharmacology. It will also explore the expectations of a professional medicinal chemist.

301024.1   Advanced Numerical Methods in Engineering

Credit Points 10 **Level** 7

Assumed Knowledge

Students should have prior knowledge of strain, stress and deflection analysis of simple structures as well as knowledge of energy principle for structural analysis.

Special Requirements

Students must be enrolled in a postgraduate course

....

The finite element method is an essential tool for the analysis and design of machine parts and civil engineering structures. The objective of this unit is to introduce the principles of finite element method and the applications of one, two and three dimensional elements in solving various engineering problems.

300906.1   Advanced Organic Chemistry

Credit Points 10 **Level** 3

Prerequisite

300876.1 Organic Chemistry

Equivalent Units

300546 - Drug Design and Synthesis, 300235 - Organic Chemistry 3

Special Requirements

Students are required to have laboratory coat, appropriate shoes and eye protection.

....

This unit builds on the reactions learnt in the unit Organic Chemistry, extending the range of C-C bond forming reactions to include the most significant in modern synthesis. In the second stage students learn to develop multistep synthetic strategies to produce target molecules using their level 2 organic chemistry and the reactions above. Structural analysis by mass spectroscopy and more advanced NMR techniques is also investigated. The students use this chemistry in a lab course designed to highlight a number of these concepts (including the synthesis of 2 pharmaceutical compounds and a team experiment) and to extend their range of practical skills.

300926.1   Advanced Physical Chemistry

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of and competence with the basic principles of physical chemistry including states and properties of matter, thermodynamics, chemical equilibria, kinetics and electrochemistry.

Prerequisite

300849.1 Physical Chemistry

Equivalent Units

300303 - Physical Chemistry 3

Special Requirements

Students are required to have laboratory coat, appropriate shoes and eye protection.

....

Advanced Physical Chemistry builds on the fundamental principals of energy changes in systems (thermodynamics), and the rates and mechanisms of reactions (kinetics) learnt in Physical Chemistry and extends this so that students gain an understanding of polymer and surface chemistries. This unit also will strengthen student's problem solving skills in quantitative chemical analysis , develop experimental techniques and advanced data-analysis skills.

300851.1   Advanced Physiology

Credit Points 10 **Level** 3

Assumed Knowledge

Demonstrated sound understanding of physiological systems of the human body.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 273

Units

Prerequisite

300818.1 Introduction to Physiology OR **300838.1** Comparative Physiology

Equivalent Units

300622 - Human Physiology, 300326 - Topics in Physiology

Special Requirements

Students must have lab coat and enclosed footwear.

....

Physiology is the study of the way in which a living organism and its bodily parts functions. Fundamental to this are ion channels. With ion channels as a central and unifying core, this unit will examine aspects of neurophysiology, sensory physiology, nutritional physiology, channelopathies, the skeleto-muscular system, the cardiovascular system, environmental adaptation and homeostasis. Students will have the opportunity to independently research, in depth, an area of physiology pertinent to their degree/interest.

300937.1   Advanced Science Project A

Credit Points 10 **Level** 2

Equivalent Units

300591 - Advanced Science Research Project A

Special Requirements

Students must be enrolled in 3562 Bachelor of Science (Advanced Science) or 3682 Bachelor of Medical Science (Advanced) or 3683 Bachelor of Natural Science (Advanced) and must have passed 80 credit points.

....

The unit is design to teach students what is required to successfully begin to answer a scientific question. It specially focuses on teaching students how to access and critically review literature on a given topic, chosen in consultation with a supervisor in the student's preferred field of study. Students will present their findings in both written and poster formats. Students also attend a one day workshop where they engage with researchers in a wide variety of fields to broaden their understanding of research.

300938.1   Advanced Science Project B

Credit Points 10 **Level** 2

Prerequisite

300937.1 Advanced Science Project A

Equivalent Units

300592 - Advanced Science Project B

Special Requirements

Must be enrolled in 3562 Bachelor of Science (Advanced Science) or 3682 Bachelor of Medical Science (Advanced) or 3683 Bachelor of Natural Science (Advanced Science).

....

This unit continues the students' training in thinking as a research scientist whilst developing analytical and critiquing skills in a range of science disciplines. Students will form hypothetical companies and develop a portfolio of scientific products that they will have to present as prospectus and in oral presentations. The students will have to assess the constraints of research having to address the WHS, gene technology, ethics and other legislative issues impacting their projects. Students will also have to manage budgets, market analyses and intellectual property issues.

300910.1   Advanced Science Project C

Credit Points 10 **Level** 3

Prerequisite

300938.1 Advanced Science Project B

Equivalent Units

300593 - Advanced Science Research Project C

Special Requirements

Students must be enrolled in course 3562 - Bachelor of Science (Advanced Science), 3682 - Bachelor of Medical Science (Advanced) or 3683 - Bachelor of Natural Science (Advanced).

....

This unit advances the students' training in thinking as a research scientist whilst developing practical skills in a particular area of interest. The student undertakes a minor research project under supervision, during which they plan how to answer a research problem, conduct research and present their findings in a research paper format and seminar.

300799.1   Advanced Theoretical Computer Science

Credit Points 10 **Level** 3

Assumed Knowledge

Students are assumed to be proficient in programming in a language such as Java or C++ to a level equivalent to that covered by 300581 Programming Techniques.

Prerequisite

200025.2 Discrete Mathematics OR **300699.1** Discrete Structures and Complexity

....

This Level 3 unit provides a comprehensive study on the logical and computational foundations of computer science. The first part of this unit covers propositional modal logic, logic programming, and basic concepts and methods of computational complexity. The second part of this unit focuses on the application of logical and computational foundations to various computer science areas. This part covers the theory and practice of model checking and system verifications, reasoning about knowledge, and logic based security policy specification and reasoning.

300747.2   Advanced Topics and Research Skills

Credit Points 20 **Level** 5

Assumed Knowledge

Successful completion of a Bachelors degree in a science discipline or tourism. Normally the student will have achieved a grade-point average of greater than 5.0 in Level 2 and 3 units.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 274

Equivalent Units

300410 - Advanced Topics and Research Skills

Special Requirements

Students must be enrolled in an honours or postgraduate degree.

....

This unit will allow students to explore more advanced topics, including wider areas of research and their applications in science, technology, tourism or the environment. It will encompass and build upon subject areas and techniques already encountered in the undergraduate program, and provide students with an appreciation of more sophisticated applications of scientific principles, emphasising the practical, social, environmental and/or economic value of the sciences. In addition, students will further develop competency in the communication of research results and conclusions through participation in seminar series within the College of Science, Technology and Environment.

200411.2 Advanced Topics in Mathematics

Credit Points 30 **Level** 5

Special Requirements

Students must be enrolled in a Bachelor Honours course, the Bachelor of Research Studies/Master of Research or the Master of Research.

....

Advanced Topics in Mathematics is an integral part of the Bachelor of Science (Honours) course work program. It is structured in such a way that there are extensive links with the other components in the program (Honours Thesis). In undertaking and completing tasks associated with this component the student will be working toward the ultimate goal of completion of the Thesis document. Successful completion of the Advanced Topics in Mathematics Program will allow development of skills, knowledge and a way of thinking to assist in the learning of mathematics/ statistics, which will help in the production of the thesis. In this program students will be given the opportunity to present work in assignments and examinations.

101295.2 Aesthetics

Credit Points 10 **Level** 3

Equivalent Units

63090 - Aesthetics

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The major philosophies of art will be examined. The Western tradition will be surveyed from the Ancient Greeks through medieval and Renaissance theories of art to modern and postmodern aesthetics beginning with Kant. Marxist and feminist aesthetics will be especially emphasised. The artistic material will primarily come from the visual arts.

300790.1 Agriculture, Food and Health

Credit Points 10 **Level** 2

Assumed Knowledge

Basic understanding of resource sustainability issues

Incompatible Units

300609 - Ecology of Production

....

This unit is designed to strengthen student understanding of the important interactions between food, agriculture, environment and health. Traditionally the topics of food, agriculture, environment and health have been taught mainly in isolation from each other. It is becoming increasingly apparent that this traditional approach bears little relevance to real world issues and in some cases acts as an impediment to progress. Alternatives to the current 'western industrialised' food production system will be explored. These include organic agriculture, local farmer markets, and consumer driven changes to food production systems.

300852.1 Air Quality and Climate Change

Credit Points 10 **Level** 3

Equivalent Units

300777 - Air Quality and Climate Change, 300628 - Air Quality Management

Special Requirements

Successful completion of 60 credit points at Level 1 and 40 credit points at Level 2. Students must wear enclosed footwear during field visit.

....

Deteriorating air quality and climate change are two major challenges facing humanity and threatening environmental sustainability and human health. As such, air quality and climate change are of International, National, State and local community concern. This unit critically analyses the many issues that relate to air pollution, including its nature, extent, impacts and monitoring. Students will examine an air pollution issue of their choice.

100985.2 American Foreign Policy Since 1945

Credit Points 10 **Level** 3

Equivalent Units

B3845 - American Foreign Policy, 100907 - American Foreign Policy Since 1945

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit will analyse both the major international issues and crises which America confronted after 1945 and how successive American presidents and their policy makers responded to these problems

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 275

100966.3   American History, 1898-1945

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit offers a history of the United States of America from 1898 until 1945. It examines the key events and issues from the Spanish-American War to the New Deal and Isolationism which shaped the course of modern America.

200023.3   Analysis

Credit Points 10 **Level** 3

Prerequisite

200028.2 Advanced Calculus

Equivalent Units

14388 - Advanced Mathematical Topics

....

Analysis provides the theoretical basis of real and complex numbers, including differentiation and integration. Topics include: field axioms and completeness, sequences, series, convergence, compactness, continuity, differentiability, integrability, and related theorems in both the real and complex number systems.

301098.1   Analysis of Agricultural Supply and Demand

Credit Points 10 **Level** 3

....

300830.2   Analysis of Change

Credit Points 10 **Level** 1

Assumed Knowledge

General Mathematics background achieved at bands 5 or 6, or Mathematics, achieved at band 4, or equivalent or 300831 Quantitative Thinking.

Equivalent Units

200191 - Fundamentals of Mathematics; 700108 - Analysis of Change (UWSC)

Incompatible Units

300672 - Mathematics 1A

Special Requirements

Students are required to have a Scientific calculator and access to a computer with mathematical software packages installed. Students may complete the 3 units Quantitative Thinking, Analysis of Change and Maths 1A in the following order: 300831 Quantitative Thinking, 300830 Analysis of Change, 300672 Mathematics 1A. This means that students may complete 300831 before attempting 300830, but not after. 300830 and 300831 may be attempted before 300672, but not after. Students may not enrol in 300831 and 300830 or 300831 and 300672 or

300830 and 300672 in the same teaching session. Students enrolled in 3621 Bachelor of Engineering, 3689 Bachelor of Engineering, 3664 Bachelor of Engineering Science or 3691 Bachelor of Engineering Science may not enrol in any of the units 300830, 300831 or 300672.

....

This Level 1 unit introduces students to the mathematical modelling techniques that are used to formulate and solve problems in the physical and biological sciences. To use these techniques successfully, students must develop the ability to formulate a problem mathematically and then be able to use the appropriate knowledge to test conclusions by analytical and numerical means. These skills will be emphasized as each technique in introduced. Apart from some introductory work on logarithms and exponentials (essential concepts in the sciences), the main techniques developed involve aspects of differential calculus, culminating in the use of differential equations to model real phenomena in the sciences.

101646.2   Analysis of Spatial Data

Credit Points 10 **Level** 2

Equivalent Units

400343 - Analysis of Spatial Data

Special Requirements

Successful completion of 40 credit points.

....

The making and the use of maps. This unit involves the critical examination of the way geographical data is produced, analysed, mapped and used to inform both private and public decisions. Natural environment, health, accessibility and residential amenity are examples of phenomena that have an important geographical dimension. Policy responses to these phenomena need to be specific with regard to locations and places. Geographic information systems software and census will be used to produce maps based on the analysis and interpretation of data relating to the student's field of interest.

300832.1   Analytical Chemistry

Credit Points 10 **Level** 2

Prerequisite

300800.1 Essential Chemistry 1 OR **300808.2** Introductory Chemistry

Equivalent Units

300297 - Analytical Chemistry 2

....

This unit provides insight into both classical methods of analytical analysis and an introduction to modern instrumental methods of analysis. Specifically, the classical methods of analysis include volumetric and gravimetric methods, while the modern instrumental methods include separation techniques and spectroscopy. The role of spreadsheets in data analysis and presentation is discussed and applied in the laboratory program.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 276

300866.1 Analytical Microbiology

Credit Points 10 **Level** 3

Assumed Knowledge

A good general knowledge of microbiology and having the technical skills needed to work safely with microorganisms.

Prerequisite

300833.1 Microbiology 1

Equivalent Units

300307 - Analytical Microbiology

Special Requirements

Students are required to have laboratory coat, appropriate shoes and eye protection.

....

The unit provides a theoretical and practical introduction to wide range of microbiological techniques that are commonly used in medical science, industrial and food microbiology, environmental science, and research. Building on a basic understanding of microbiology the unit shows how microorganisms can be isolated, identified, and enumerated using traditional microbiological methods, modern variations on traditional methods, and more recent immunological and molecular methods. The laboratory component is an integral component of the unit as the students use a variety of techniques, methods and commercial systems that are applied in microbiological laboratories, and incorporates problem solving and inquiry based exercises.

100846.2 Analytical Reading and Writing

Credit Points 10 **Level** 1

Equivalent Units

700131 - Analytical Reading and Writing (UWSC)

....

This unit aims to develop and refine students' communication skills in analytical reading, writing, critical reasoning and the analysis of argument. It aims to develop students' understanding of how arguments are made, along with their ability to analyse and evaluate arguments, while at the same time developing students' capacity to make sophisticated arguments in essay form.

301107.1 Analytics Programming

Credit Points 10 **Level** 1

Assumed Knowledge

Familiarity with computer software programs such as Excel.

Special Requirements

Access to a Computer.

....

This unit covers the use of computers and computer programming for Data Science. After briefly considering spreadsheet systems, the unit will consider programming in the statistical system "R" in depth. Finally, other special purpose languages will be touched briefly (eg. SQL).

300897.1 Anatomy of the Head and Neck

Credit Points 10 **Level** 3

Prerequisite

300825.2 Introduction to Anatomy

Equivalent Units

300316 - Anatomy of the Head and Neck, 300750 - Anatomy of the Head and Neck

Special Requirements

Students must be enrolled in 3577 Bachelor of Medical Science, 3657 Bachelor of Medical Science (Advanced), 3673 - Bachelor of Medical Science or 3682 Bachelor of Medical Science (Advanced) Students must also have a laboratory coat.

....

This unit builds on the systems anatomy taught during the first year, offering a regional study of the human head & neck. Emphasis is placed on the identification and description of the structures, including the correlation of structure and function. Cadaveric specimens are used to aid the learning of these regions and their three-dimensional aspect, including the anatomical variation found in these regions.

300894.1 Anatomy of the Thorax and Abdomen

Credit Points 10 **Level** 2

Prerequisite

300825.2 Introduction to Anatomy

Equivalent Units

300317 - Anatomy of the Thorax and Abdomen, 300751 - Anatomy of the Thorax and Abdomen

Special Requirements

Student must be enrolled in course code 3577 - Bachelor of Medical Science, 3673- Bachelor of Medical Science, 3657 - Bachelor of Medical Science/Bachelor of Information and Communications Technology, or 3682 - Bachelor of Medical Science (Advanced). Students must have lab coat and enclosed shoes.

....

This unit builds on the systems anatomy studied during first year, and explores the regional anatomy of the contents and walls of the human thorax and abdominopelvic cavities. Emphasis is placed on the relationship between structures, and the nexus between form and function. Cadaveric specimens are used in this unit to illustrate the array of normal anatomical variation.

100244.2 Ancient Western Culture: Periclean Athens

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 277

Units

The Athens of Pericles is studied from three perspectives: philosophy, art and history. The use of reason and rhetoric is examined through the works of some pre-Socratics, sophists and Socrates. Architectural style and the artistic representation of the human will be studied with particular reference to the Parthenon. This philosophy and art will be placed in the context of the history of the body, the city-state and democratic citizenship.

300878.1   Animal Behaviour

Credit Points 10 **Level** 3

Equivalent Units

300564 - Animal Behaviour

Special Requirements

Successful completion of 120 credit points in the Bachelor of Science or Bachelor of Natural Sciences.

....

Focusing on a variety of wildlife and domestic animal species, the unit addresses how classic ecological and evolutionary principles shape animal behaviour by weighing the experimental and observational evidence for each idea. We illustrate concepts with examples from a wide range of taxonomic groups of animals in diverse ecosystems. Students will conduct experimental field and laboratory procedures, as well as observe and work with groups of animals on the UWS Hawkesbury campus.

300834.1   Animal Health and Welfare

Credit Points 10 **Level** 2

Prerequisite

300802.1 Biodiversity

Equivalent Units

300424 - Animal Health and Welfare

....

This unit will introduce students to the major issues related to animal health and welfare that form essential knowledge for those working with animals. In particular, students will gain an understanding of disease and methods for disease control as well as an introduction to disease diagnosis. In addition, students will gain knowledge about the relationships between animal management and the health and welfare expectations for domesticated and wild animals. The causes of common animal diseases will be introduced as well as the legal obligations of those owning, working or observing animals with respect to maintaining and monitoring their health and welfare.

300853.1   Animal Nutrition and Feeding

Credit Points 10 **Level** 3

Assumed Knowledge

A basic understanding of animals and biology.

Equivalent Units

300562 - Animal Nutrition and Feeding

Special Requirements

Successful completion of 60 credit points.

....

Animal nutrition and feeding is fundamental to many aspects of animal production and wildlife systems. This unit aims to provide students with knowledge of nutrient requirements for different types of animals and the nutrient composition of common feeds. Students will evaluate and formulate rations to meet a range of animal requirements at different stages of growth, reproduction, lactation and production.

300854.1   Animal Production

Credit Points 10 **Level** 3

Equivalent Units

300427 - Animal Production

Special Requirements

Successful completion of 120 credit points of Bachelor of Natural Science or Bachelor of Science units.

....

Animal production is about producing animals for food, companionship and conservation. This unit aims to develop an understanding of the major animal production systems used for food and fibre and other resources in Australia (intensive and wildlife), and to apply this knowledge to improving problematic issues and understanding topical issues. Topics will focus on the application of animal production principles to these production systems.

300835.1   Animal Reproduction

Credit Points 10 **Level** 2

Assumed Knowledge

Some knowledge of biology, including basic animal anatomy, introductory animal physiology and some understanding of reproductive behaviour.

Equivalent Units

AG306A - Equine Reproduction and Stud Management; 300563 - Animal Reproduction

Special Requirements

All activities in the unit involving live animals must be approved by the UWS Animal Care and Ethics Committee. All activities in the unit involving the use of animal specimens must be approved by the UWS Institutional Biosafety and Radiation Safety Committee.

....

Reproduction is the origin of life. The aim of this unit is to provide students with a sound understanding of reproduction of both domestic and non domestic animals so that they can design and manage a breeding program for a species of choice. Topics will include anatomy and physiology of male and female reproductive tracts; hormonal control of reproduction; fertilisation, pregnancy, parturition and lactation and advanced reproductive technologies. These topics will be explored in a range of species across different taxonomic groups.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 278

300801.1   Animal Science

Credit Points 10 **Level** 1

Equivalent Units

300421 - Animal Science

Special Requirements

Students require lab coat, closed in shoes, safety glasses, work boots, long pants and long-sleeved shirts.

....

This unit will provide students with an understanding of comparative physiological and anatomical concepts of a range of mammalian and avian species. Students will develop the skills to apply these concepts in practical situations through the use of field observations and the relationship of these to functional anatomy and physiology of production animals. In addition students will develop many of the principles and concepts employed in animal production. Concepts discussed in lectures are reinforced by practical classes held in the laboratory and in the outdoor laboratories.

300898.2   Appendicular Skeleton

Credit Points 10 **Level** 2

Prerequisite

300825.2 Introduction to Anatomy

Equivalent Units

300755 - The Appendicular Skeleton, 300325 - The Appendicular Skeleton

Incompatible Units

400881 - Functional Anatomy

Special Requirements

Students must be enrolled in 3577 Bachelor of Medical Science, 3657 Bachelor of Medical Science (Advanced), 3673 - Bachelor of Medical Science or 3682 Bachelor of Medical Science (Advanced). Students must also have a laboratory coat in this unit.

....

This musculoskeletal unit builds on the basic anatomy taught during the first year, offering a regional study of the human upper and lower limbs, including their respective girdles. Emphasis is placed on the identification and description of the structures, including the correlation of structure and function. Cadaveric specimens are used to aid the learning of these regions and their three-dimensional aspect, including the anatomical variation found in these regions.

301110.1   Applications of Big Data

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of computer software, databases, and entry-level statistics.

Prerequisite

301107.1 Analytics Programming OR **300580.2** Programming Fundamentals

....

Many techniques and tools have been developed over the past decade to cope with the ever-growing needs for the processing and analysis of big data. This unit will cover the key techniques that have been widely used in big data applications, such as relational and Not Only Structured Query Language (NoSQL) databases, Web Services, parallel and cloud computing, MapReduce, Hadoop and its eco-system. It aims to introduce the emerging technologies and applications in big data to students, and keep up with the latest trends in the industry.

401147.1   Applied Biomechanics

Credit Points 10 **Level** 3

Assumed Knowledge

It is expected that students have the knowledge and skills associated with the prerequisite unit.

Prerequisite

401140.1 Biomechanics

Equivalent Units

400330 - Applied Biomechanics of Exercise, 400889 - Applied Biomechanics of Sport and Exercise

Special Requirements

Students must be enrolled in 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

To fully understand the science underlying the optimisation of human movement, students require a comprehensive working knowledge of Biomechanics. This unit represents a theoretical and applied study of selected topics in Biomechanics. It builds on the basic principles of Biomechanics that are presented in the unit Biomechanics and applies this knowledge to the analysis of sporting and human exercise performance. To achieve this, advanced methods and concepts in the biomechanical analysis of human performance are identified and explored.

300986.1   Applied Mechanics

Credit Points 10 **Level** 4

Assumed Knowledge

Student should have prior knowledge of strain, stress and deflection analysis of simple structures.

Prerequisite

300732.2 Structural Analysis

....

Applied mechanics deals with the mechanical responses of structural components under various loading and support conditions. This unit will introduce the theoretical foundations and solution methods for the stability and dynamic responses of beams, columns and plates and their associated applications in engineering practices.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 279

300908.1 Applied Nutrition

Credit Points 10 **Level** 3

Prerequisite

300933.1 Nutrition and Health 1 AND **300934.1** Nutrition and Health 2

Equivalent Units

300653 - Applied Nutrition

....

This unit builds on basic concepts in human nutrition and facilitates the study of nutrition needs across the lifecycle and for specific lifestyle and nutrition related diseases. This study will incorporate how to assess nutritional status (incorporating anthropometric, biochemical, clinical, dietary and physical activity assessment) of individuals and groups, understand the strengths and limitations of various methods, how to manipulate diets to ensure nutritional sufficiency and how to provide nutrition education regarding lifestyle related diseases and sports nutrition.

401146.1 Applied Physiology

Credit Points 10 **Level** 3

Prerequisite

401143.1 Exercise Prescription I AND **400883.2** Exercise Bioenergetics AND **401142.1** Exercise Physiology

Equivalent Units

400329 - Sport Physiology, 400888 - Advanced Sport Physiology

Special Requirements

Must be enrolled in 4658 - Bachelor of Health Science (Sport and Exercise Science). Students must have the following: 1. Prohibited Persons (Child Protection) and Criminal record checks 2. NSW Health & Immunisation check 3. Current First-Aid Certificate

....

This unit presents the knowledge and laboratory skills essential to understanding the physiological demands on the sports participant, as well as to develop, implement and evaluate sports-specific training programs. Students will develop the knowledge and skills necessary to perform and interpret results for a number of standard laboratory and field-based physiological tests used in talent identification and the assessment of high performance athletes. Prescription focuses on the development and implementation of sport specific fitness programs. Also covered are the physiology of ergogenic aids, overtraining, muscle fatigue and soreness; physiological factors limiting performance; and physiological responses to exercise in challenging environments

401167.1 Applied Research in Health Care

Credit Points 10 **Level** 7

Equivalent Units

400200 - Applied Nursing Research

Special Requirements

Students must be enrolled in a Postgraduate course

....

Research is a necessary undertaking toward the continued development of nursing, midwifery and health science and practice. This unit prepares students for undertaking or participating in research in the clinical setting. It also seeks to prepare students to consider higher degree research opportunities. Students will explore the various theoretical underpinnings of research as well as develop a clear understanding of various research designs, data collection methods, sampling techniques and data analysis.

200033.5 Applied Statistics

Credit Points 10 **Level** 2

Prerequisite

200032.5 Statistics for Business OR **300700.5** Statistical Decision Making OR **200263.4** Biometry OR **200052.4** Introduction to Economic Methods

Special Requirements

Scientific calculator and access to a computer with appropriate software, using Minitab, Excel and SPSS.

....

From 2016 this unit has been replaced by 301032 Making Sense of Data. The unit builds on the basic statistical concepts introduced in first year, and also prepares students for broader application of statistics for those majoring in science or business. Topics include some common probability distributions; revision of hypothesis testing; analysis of categorical data; analysis of variance; simple and multiple linear regression analysis and correlation; some nonparametric methods; and fundamentals of time-series analysis.

400867.2 Approaches to Health Promotion

Credit Points 10 **Level** 2

Equivalent Units

400782 - Essentials of Health Promotion, 700065 - Approaches to Health Promotion (UWSC)

....

Health promotion is a process that seeks to enable individuals, carers, communities and populations to increase control over their health by addressing the determinants of health and equity issues, resulting in improved health outcomes. Theoretical underpinnings of the various approaches to health promotion are explored, enhancing and limiting factors analysed and the levels of health promoting actions demonstrated, including the bigger picture approaches of working with policy, environmental and engineering solutions. Health promotion competencies are developed including conducting a needs and stakeholder analysis, also planning and evaluating an intervention. The best practice, evidence base for health promotion is outlined and the need to move beyond education.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 280

700065.3 Approaches to Health Promotion (WSTC)

Credit Points 10 **Level** 2

Equivalent Units

400867 - Approaches to Health Promotion

Special Requirements

Students must be enrolled at Western Sydney University, The College. This is a Level 2 unit and is not to be studied in the first semester of the Diploma. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

Health promotion is a process that seeks to enable individuals, carers, communities and populations to increase control over their health by addressing the determinants of health and equity issues, resulting in improved health outcomes. Theoretical underpinnings of the various approaches to health promotion are explored, enhancing and limiting factors analysed and the levels of health promoting actions demonstrated, including the bigger picture approaches of working with policy, environmental and engineering solutions. Health promotion competencies are developed including conducting a needs and stakeholder analysis, also planning and evaluating an intervention. The best practice, evidence base for health promotion is outlined and the need to move beyond education.

401007.1 Approaches to Professional Nursing Practice

Credit Points 10 **Level** 1

Assumed Knowledge

Knowledge equivalent to Year 1 Autumn subjects in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced).

Incompatible Units

400748 - Becoming a Nurse; 400752 - Knowing Nursing

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced).

....

This unit explores the nature and professional context of nursing. The roles and functions of the nurse and their relationship to others are considered in terms of expected competence, responsibilities, accountabilities and scope of practice.

100641.3 Approaches to Text

Credit Points 10 **Level** 1

Equivalent Units

63165 - Approaches to Text, 700136 - Aproaches to Text (UWSC)

....

Why do we read books? Reading literary texts is crucial to our ways of understanding the world and ourselves. In this unit students learn that reading resilience, close reading skills and the ability to identify specific literary techniques are foundational to studying literature. Students will read a range of Australian texts including fiction, poetry, short stories, criticism and digital writing. They will analyse how meanings in those texts are shaped by diverse cultural and international contexts. This unit builds reading capacity while engaging students in key debates about literature today: what it means, how it works, and why it matters.

300655.2 Approved Industrial Experience

Credit Points 0 **Level** 2

Equivalent Units

SC204A - Approved Industrial Experience, EH218A - Approved Industrial Experience

....

This is a "Work Experience" unit, for which no student contribution fee is charged, nor will it consume Student Learning Entitlement (SLE). Students are required to obtain at least ten weeks, vocationally relevant, industrial experience during their course of study. The aim of this is to provide students with opportunities to apply theoretical concepts to real world situations, assisting their personal and professional development. Approved industrial experience aims to provide flexibility for students to pursue areas of interest and to assist in their selection of appropriate elective units in their course and to met the professional accreditation requirements as maybe required in your key program. Students are required to organise, formalise and validate at least ten weeks of university approved industry experience within an industrial, commercial or government situation during the course of their study.

300929.1 Aquatic Ecology

Credit Points 10 **Level** 3

Assumed Knowledge

Concepts of classification, evolution, taxonomy, cellular processes plant and animal structure and function, normal distribution, representative sampling, probability and uncertainty.

Equivalent Units

300465 - Aquatic Ecology

Special Requirements

Successful completion of 80 Credit Points at Level 1 and 40 credit points at Level 2. Students must also have covered footwear for field excursions.

....

Temperate freshwater, estuarine and marine aquatic ecosystems play vital roles in providing food, water, recreation and other ecosystem services to human society and habitats for important species that make up global biodiversity. Yet aquatic habitats are the most threatened ecosystems on earth, under threat from global climate change and urbanisation. Through inquiry and problem solving this unit will equip students with the necessary techniques in experimental design and analysis needed to

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 281

investigate aquatic ecosystems and knowledge of the main animal and plants in aquatic and marine ecosystems. The logic and philosophy of science, scientific studies and experimental analyses will be used to understand temperate aquatic ecosystems throughout this unit. On completion students will have the background knowledge and skills communicate to a range of audiences, so that they can contribute beneficially to management and/or conservation of waterways and oceans and the biodiversity within.

100041.2 Arabic 101

Credit Points 10 **Level** 1

....

This unit is designed as an introduction to the Arabic language as well as the contemporary and popular culture of the Arabic-speaking people. It is intended for students who are at beginner level in Modern Standard Arabic in all four skills -listening, speaking, reading and writing. Components of this unit may be presented in English.

100042.2 Arabic 102

Credit Points 10 **Level** 1

....

This is a post-beginners' level unit in Arabic, intended for students with some background in the language (equivalent to at least 2 Unit HSC Arabic). As part of a major in Arabic this unit will help students to continue in the process of acquisition of Modern Standard Arabic through the study of the language and intensive practice in listening, speaking, reading and writing. This unit also aims to familiarise students with elements of modern Arab culture including issues of Arabic language in Australia.

102019.1 Arabic 201

Credit Points 10 **Level** 2

Assumed Knowledge

100042 - Arabic 102 or equivalent knowledge

Equivalent Units

101699 - Language and Communication Skills 2A: Arabic

....

This is an intermediate level unit in Arabic intended for two groups of students: (a) students of English speaking backgrounds or other language backgrounds who have achieved a degree of competence in the language at least at the HSC Level; and (b) Arabic language background students whose education has been in English as the medium of instruction in all subjects other than Arabic and who, therefore, have some gaps in their knowledge of Arabic, particularly in situations requiring a more formal language register. The unit is designed to consolidate and advance the acquisition of Modern Standard Arabic for post beginner learners of the language. While consolidating language skills, students will also develop further knowledge of the Arab culture. A range of DELL (Digitally Enhanced Language Learning) activities are utilised as part of the blended learning mode of delivery for this unit. NOTE: Students enrolling in this unit as part of a major or

sub major in Arabic must enrol in Arabic 202 at the same time

102020.1 Arabic 202

Credit Points 10 **Level** 2

Assumed Knowledge

100042 Arabic 102 or equivalent knowledge

Equivalent Units

101699 - Language and Communication Skills 2A: Arabic

....

This unit further develops students' language skills acquired in Arabic 201 to equip students with more sophisticated language skills and knowledge. It aims to extend learners' skills within a range of topics and to cover basic structural aspects of the language, at a post-beginner level. A range of DELL (Digitally Enhanced Language Learning) activities are utilised as part of the blended learning mode of delivery for this unit. NOTE: Students enrolling in this unit as part of a major or sub major in Arabic must enrol in Arabic 201 at the same time.

102021.1 Arabic 203

Credit Points 10 **Level** 2

Assumed Knowledge

Arabic 102 or equivalent knowledge

Equivalent Units

101704 - Language and Communication Skills 2B: Arabic

....

This is one of the components of the Arabic major and sub-major. It assumes an intermediate level of competence in the language. It aims to extend (intermediate) learners' skills with a particular focus on listening, speaking and oral interaction in Arabic, in a range of situations, by exposing students to realistic interactions, including the Arabic-Australian community. The unit also aims to extend the learners' lexicon and structures, particularly those used in talking about current personal experiences as well as events, and popular Arab personalities. A range of DELL (Digitally Enhanced Language Learning) activities are utilised as part of the blended learning mode of deliver for this unit. NOTE: Students enrolling in this unit as part of a major or sub major in Arabic must enrol in Arabic 204 at the same time.

102022.1 Arabic 204

Credit Points 10 **Level** 2

Assumed Knowledge

Arabic 201/202 or equivalent knowledge

Equivalent Units

101704 - Language and Communication Skills 2B: Arabic

....

This is an intermediate unit in the Arabic major or sub-major. It provides an extension and consolidation of reading comprehension, and writing skills, as well as lexical enrichment in Modern Standard Arabic, particularly its range of written registers and their linguistic characteristics.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 282

The content for reading and writing activities will be selected from newspapers, magazines, short stories and other printed media. NOTE: Students enrolling in this unit as part of a major or sub-major in Arabic must enrol in Arabic 203 at the same time.

101949.2 Arabic 301

Credit Points 10 **Level** 3

Assumed Knowledge

All level 2 Arabic units or equivalent knowledge.

....

This is the first of a series of two units that aim to provide a thorough review of comprehension, speaking, reading and writing skills, as well as grammar and vocabulary of Modern Standard Arabic, its range of registers and its linguistic characteristics. This unit is intended for students who have knowledge and skills in Arabic equivalent to two years of tertiary education in the language and who wish to consolidate, develop and improve these skills. A range of DELL (Digitally Enhanced Language Learning) Activities are utlised as part of the Blended Learning mode of delivery for this unit.

100048.2 Arabic 302 - Arabic Advanced Language and Grammar

Credit Points 10 **Level** 3

....

This is the second of two units that aim to provide a thorough review of comprehension, speaking, reading and writing skills, as well as grammar and vocabulary of Modern Standard Arabic, its range of registers and its linguistic characteristics. This series is intended for students who have knowledge and skills in Arabic equivalent to two years of tertiary study of the language, and who wish to consolidate, develop and improve these skills and knowledge. This unit is mandatory for students who wish to pursue a major in Arabic.

100049.2 Arabic 303: Advanced Writing Skills

Credit Points 10 **Level** 3

....

This unit is aimed at those who have successfully finished 100044 - Arabic 202, or have an advanced speaking and writing proficiency in Modern Standard Arabic. It is one of the obligatory units for students intending to graduate with Arabic as a major or sub-major. It seeks to develop the writing skills to prepare students to make professional use of the language, and it is particularly recommended for those who wish to involve themselves in areas such as language teaching and translation. Students will be introduced to a full range of text types and language purposes. They will be guided to analyse, interpret and evaluate passages provided, and will be encouraged to extend their ability by experimenting with a variety of writing styles.

100050.2 Arabic 304: Arabic Advanced Speaking

Credit Points 10 **Level** 3

....

This is an advanced Arabic unit for students undertaking a major in Arabic or the Bachelor of Arts (Interpreting & Translation) (Arabic stream). As a companion unit of Arabic 303 (Advanced Writing Skills), it aims at preparing students to make a professional use of the language, in this case by placing particular emphasis on oral skills, and it is also specially recommended for those wishing to pursue careers in areas such as language teaching, interpreting and translation. Students will be introduced to a full range of oral text types and language purposes. They will be guided to analyse, interpret and evaluate examples of oral discourse, and be encouraged to develop effective public speaking skills.

100052.2 Arabic 306: Arabic Novel and Short Story

Credit Points 10 **Level** 3

....

This is an optional unit in the Arabic major program, which aims to introduce students to the study of the Arabic novel and short story, and which examines the historical, political, social and cultural context that this literature reflects. This will be done by studying selected novels and short stories. Students will be able to do a research component on a novel of their choice. This unit will also examine children's literature, including traditional children stories and contemporary Arabic literature, as well as translated western traditional stories.

100054.2 Arabic 308:Language Past and Present

Credit Points 10 **Level** 3

....

This unit aims to give students an understanding of the phonological, morpho-syntactic, semantic and pragmatic changes that have occurred to the Arabic language both spoken and written in the last century. Particular attention will be paid to the different dialects spoken in some of the Arab countries and their relation to Modern Standard Arabic. A special study will be made of the Australian Arabic used by migrant communities.

101442.2 Asia in the World

Credit Points 10 **Level** 1

Equivalent Units

100867 - Foundations of Asia

....

This unit introduces International Relations and Asian Studies. Considering both traditional and contemporary times, it seeks to place Asia's diverse cultures in a global context. It examines issues such as how to define Asia, how Asian states related to each other, and how Western ideas of international relations have transformed these

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 283

relations. The unit considers how the great religions/ philosophies of Asian societies - Buddhism, Hinduism, Islam, Christianity and Confucianism - have influenced Asian states and relations between them. It explores other forces which have shaped the civilisations, polities and communities of Asia and how they have related to each other and the world beyond.

300916.2 Astroinformatics

Credit Points 10 **Level** 3

Prerequisite

300580.2 Programming Fundamentals

....

Modern astronomy is strongly driven by large datasets, which require advanced computing procedures to analyse. Students will learn about the science of stars, planets and galaxies; the use of computers in science; and how to formulate and solve challenging problems in modern science using high-level computer skills. These skills are highly transferable to other occupations.

102165.1 At the cultural interface - learning two ways

Credit Points 10 **Level** 7

....

History, politics and ignorance make the cultural interface between Aboriginal and non-Aboriginal Australians contested and fraught. In turn, cultural misunderstanding contributes to inequities in educational attainment, employment and social disadvantage. Students apply a critical perspective to the discourses surrounding Aboriginal disadvantage and white privilege. They develop processes to engage respectfully with local Aboriginal and Islander communities in order to learn and share in a two-way exchange of knowledge. They listen deeply and intersubjectively in their exploration of Aboriginal worldviews, and they reflect on what it means to decolonise their own thinking so as to build partnerships based on mutuality and reciprocity.

200535.2 Auditing and Assurance Services

Credit Points 10 **Level** 3

Assumed Knowledge

A basic knowledge of computing.

Prerequisite

200109.4 Corporate Accounting Systems

Equivalent Units

AC301A - Auditing, 61151 - Principles of Auditing, 200107 - Auditing Principles

Incompatible Units

61152 - Auditing & Professional Practice

....

This unit studies the roles and responsibilities of the auditor, auditing principles and standards and the application of those standards, particularly in an electronic environment.

100958.2 Australia and the World

Credit Points 10 **Level** 1

Equivalent Units

700130 - Australia and the World (UWSC)

....

Australia is a unique country yet typical of the neo-Europes of the Americas and the Pacific, all conquered and settled by Europeans since 1500. This unit will explore the patterns of human settlement of the continent, beginning with the distinctive cultures and languages of the indigenous peoples of Australia and nearby islands. The unit will pose two fundamental questions: how did Australia come to be the sort of society it is? How have Australians, both indigenous and post-1788, settlers related to the world around them? Major themes are migration, trade, culture, political structures and foreign relations.

102210.1 Australia-Asia Education

Credit Points 10 **Level** 3

....

This unit aims to examine knowledge of Asia in Australian schools; to explore ways of strengthening Australia-Asia people-to-people and institutional relationships; and, to identify ways in which connections in the Asia can link to teachers and school students' work readiness and career opportunities. By employing transformational pedagogies, including post-monolingual learning to encourage a genuine two-way flow of knowledge between Australia and the Asian region, this unit will investigate ways in which Australia's teachers can deepen relationships with the region.

102004.1 Australian Colonial History

Credit Points 10 **Level** 3

Equivalent Units

100868 - Foundations of Modern Australia, 100986 - Australian History 1860-1920.

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit introduces students to the 18th and 19th century foundations of modern Australia, and to the social, economic, political and cultural events that shaped Australian history. Students will be encouraged to consider the process of historical change within an historiographical framework and will use primary sources to explore some of these debates. Some of the themes explored will be colonisation, convictism, class, urbanisation, gender, land, indigenous society, culture and political developments leading to the federation of the Australian colonies in 1901.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 284

100987.3 Australian History Since 1920

Credit Points 10 **Level** 3

Equivalent Units

100906 - Australian History Since 1920, B3680 - Australian History Since 1920

Special Requirements

Successful completion of 60 credit points

....

In 2013 this unit replaced by 101999 - Twentieth Century Australia. This unit includes a general overview of major developments in Australian political and social history since 1920, and also focuses on particular issues such as the Great Depression, 1949 coal strike, the Petrov Affair and the Whitlam dismissal.

101872.1 Australian Indigenous History from Federation to Reconciliation

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit aims to explore the history of the relationship between Indigenous and non-Indigenous Australians from Federation (1901) to the present. At the beginning of the twentieth century, Australia became a nation without paying much attention to the first Australians. It was widely assumed that they would die out or at least remain an insignificant welfare problem. Instead, these first Australians survived and grew as a minority population; they also increasingly made themselves heard as a people - so successfully that in 2008 the Parliament of Australia felt obliged formally to apologise for their years of mistreatment. This unit highlights two stories: the non-Indigenous transition from complacency to engagement, and the survival and increasing political effectiveness of the descendants of Australia's first peoples.

101919.1 Australian Indigenous History: From first contact to 'dying race'

Credit Points 10 **Level** 3

Equivalent Units

101685 - Australian Indigenous History

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Until 1788, Australia was peopled by those who we now call Aborigines. Then Europeans arrived and began to spread across the continent, displacing and marginalising the Aborigines. This unit will tell the stories of that transformation, beginning with an account of the ideas and motivations of British authority in the late eighteenth century and concluding at the moment when six British colonies formed a federated nation. Topics to be covered will include: violence, humanitarianism, Christian missions,

institutional authority. The course will emphasise and explain regional and temporal differences in the ways that Indigenous and non-Indigenous interacted. Students will study primary sources and learn to understand them in context.

101973.1 Australian Politics

Credit Points 10 **Level** 2

Equivalent Units

63284 - Australian politics, 100266 - Introduction to Australian Politics, 100848 - Australian Politics

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit provides an introduction to Australian Politics. It outlines the central features of the federal political system with attention to both historical background and current debates. In addition to study of the institutional frameworks (the Constitution, parliament, political parties and so on), the unit examines the dynamics of inclusion and exclusion that have shaped Australian politics. It explores what it has meant in the past, what it means in the future, for Australians to live together as members of a political community.

100849.4 Australian Textual Studies

Credit Points 10 **Level** 3

Equivalent Units

63233 - Australian Textual Studies, B3858 - Australian Authors: Special Study, B3856 - Australian Literature: the city and the bush

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit aims to increase students' knowledge of the scope and variety of Australian writing. It examines a range of Australian texts from a number of contexts, usually organised along historical and/or thematic lines, and considers the role of writing - both "high" literature and more popular forms - in constructions of Australian culture. Issues of place, gender and race may be foregrounded, and consideration given to how these influence images of Australia. Film and television texts may also be included or emphasised.

300735.2 Automated Manufacturing

Credit Points 10 **Level** 2

Equivalent Units

86301 - Automated Manufacturing

Special Requirements

Students must have passed 2 units in 200237 Mathematics for Engineers 1 and 300463 Fundamentals of Mechanics OR must have passed 2 units in 200191 Fundamentals of Mathematics and 300304 Sustainable Design: Materials Technology before they can enrol in this unit.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 285

....

The aim of this unit is to provide an introduction into the fundamentals of manufacturing operations, automation and control technologies including numerical control and industrial robotics. In addition, material handling and identification technologies will be discussed as well as manufacturing systems. The latter will examine single-station manufacturing cells, manual assembly lines, automated production and assembly lines as well as flexible manufacturing systems. Mechanical behaviour of common materials used in manufacturing will be studied, and their suitability for various manufacturing processes including metal cutting, sheet-metal forming, bulk deformation and abrasion. Other processes such as rapid prototyping and rapid tooling will also be included.

200818.1   Bank Management

Credit Points 10 **Level** 3

Assumed Knowledge

Students who have completed the unit Corporate Financial Management or equivalent will find this unit more manageable.

....

Bank Management is approached from an operational perspective. The unit provides students with an understanding of modern banking, identifies the main types of risk confronted by banks, applies relevant techniques to measure and manage those risks and provides students with an understanding of international bank management. An understanding of the banking sector is essential for all finance graduates and may also be of interest to students in other disciplines considering careers in the banking sector.

401027.1   Being a Professional Nurse (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 190 credit points in an undergraduate advanced nursing program.

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit explores the process of transition from student to professional practitioner. Students undertaking the BN Advanced will gain an understanding of the congruence between the principles of Primary Health Care and professional regulatory frameworks. The role of the graduate nurse will be comprehensively explored through a detailed examination of the frameworks governing practice and professional conduct. This unit will build capacity in students to meet their professional responsibilities as practitioners in nursing. Students will also have the opportunity to discuss career planning and ongoing professional development.

401021.1   Being a Professional Nurse or Midwife

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 190 credit points in an undergraduate nursing or midwifery program.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4692 Bachelor of Nursing Graduate Entry or 4684 Bachelor of Midwifery.

....

This unit explores the process of transition from student to professional practitioner. Students will gain an understanding of the congruence between the principles of Primary Health Care and professional regulatory frameworks. The role of the graduate nurse or midwife will be comprehensively explored through a detailed examination of the frameworks governing practice and professional conduct. This unit will build capacity in students to meet their professional responsibilities as practitioners in nursing or midwifery. Students will also have the opportunity to discuss career planning and ongoing professional development.

101449.2   Bilingualism and Biculturalism

Credit Points 10 **Level** 3

Equivalent Units

A2014 - Bilingualism and Biculturalism

....

Bilingualism and biculturalism are important aspects of life in Australia: many Australian residents are, were, or could be, bilingual and/or bicultural. This unit aims to give students an understanding and appreciation of the most important facets and manifestations of bilingualism and biculturalism, in the linguistic, cognitive, personal, societal and educational spheres, particularly with regard to the Australian context. It also aims to show students how this unit relates to broader studies in education, humanities, linguistics, and social sciences.

300802.1   Biodiversity

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of biology and chemistry

Equivalent Units

300539 - Biodiversity, 300792 - Biology A - The Diversity of Life, 300222 - Biology 2, 700032 Biodiversity (UWSC), 700095 - Biodiversity (UWSC)

Special Requirements

Students are required to have safety glasses, lab coat, enclosed shoes.

....

How many species walk, fly, swim or slither, crawl, hop, wriggle or just float, hitchhike or move so slowly that they appear not to move at all? No one knows and new species

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 286

appear almost every day. This unit focuses on this spectacular diversity of living things and the process of evolution. Students explore and classify biodiversity and how organisms function, acquire and assimilate resources and co-ordinate growth and reproduction. Organisms interact with one another and their environment forming a complex set of interactions in ecosystems. It is these interactions that have driven evolution. Ultimately human survival depends on the sustainable use of this biodiversity and ecosystems.

700095.2   Biodiversity (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of biology and chemistry

Equivalent Units

300539 - Biodiversity, 700032 - Biodiversity (UWSC), 300802 - Biodiversity

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

How many species walk, fly, swim or slither, crawl, hop, wriggle or just float, hitchhike or move so slowly that they appear not to move at all? No one knows and new species appear almost every day. This unit focuses on this spectacular diversity of living things and the process of evolution. Students explore and classify biodiversity and how organisms function, acquire and assimilate resources and co-ordinate growth and reproduction. Organisms interact with one another and their environment forming a complex set of interactions in ecosystems. It is these interactions that have driven evolution. Ultimately human survival depends on the sustainable use of this biodiversity and ecosystems.

200906.1   Bioethics

Credit Points 10 **Level** 7

Assumed Knowledge

Bachelor of Laws or equivalent qualification.

Special Requirements

Students must be enrolled in 8083 Bachelor of Research Studies/Master of Research or 8084/8085 Master of Research.

....

In Spring 2016, this unit replaced by 200957 - Bioethics in Perspective. This unit explores a range of ethical and legal issues in public health, biomedical research, biotechnology and medical practice.

300909.1   Biological Adaptation to Climate Change

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 40 credit points at Level 2.

....

This unit investigates how organisms respond to variation in climate and what can be done to reduce their vulnerability to anthropogenic climate change. The unit makes use of a novel conceptual framework that defines 'vulnerability' as a function of the 'exposure' and 'sensitivity' of organisms to climate change. Therefore, we will begin by exploring how organisms are exposed to climate change, from regional climatic changes acting at the scale of populations, to local climatological effects acting at the scale of individuals. Next, we will examine what determines the sensitivity of organisms, focusing on the physiological, behavioural, and life-history traits that affect the ability of organisms to cope with and adapt to climate change. Then, we will show how exposure and sensitivity combine to determine the vulnerability of organisms, including in both managed and natural ecosystems. Finally, we will discuss the 'mitigation' and 'adaptation' strategies that can prevent the worst of the potential impacts from becoming realised and help protect our biodiversity in the face of anthropogenic climate change.

401140.1   Biomechanics

Credit Points 10 **Level** 2

Assumed Knowledge

It is assumed that students have knowledge of structural and functional anatomy of the human body. Students also need to be able to apply basic concepts in maths and physics.

Equivalent Units

400139 - Biomehanics and Kinesiology, 400882 - Introduction to Biomechanics

Special Requirements

Students must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science), 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4662 Bachelor of Health Science/Master of Physiotherapy, 4706 Bachelor of Physiotherapy, 4707 Bachelor of Physiotherapy (Honours), 4708 Bachelor of Podiatric Medicine or 4709 Bachelor of Podiatric Medicine (Honours)

....

The study of biomechanics, the science that examines the forces acting upon a structure and the effects of these forces, is essential for understanding how the human body moves during daily activities, exercise and sport. It is also important when considering where problems may arise with human movement, such as with disease processes, over exercising and injury and postural pathology. This unit is designed to introduce the student to biomechanics by studying: the mechanical principles of human movement: balance and equilibrium: mechanical factors involved in tissue type and motion; and the analysis of human movement.

301122.1   Biomedical Electronics

Credit Points 10 **Level** 3

Assumed Knowledge

Basic electronic (amplifiers and filters); computer skills.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 287

Units

Prerequisite

300361.3 Introduction to Human Biology

Special Requirements

Students must be enrolled in the 3740 Bachelor of Engineering (Honours) program.

....

This unit will cover recent advances in biomedical electronics including electronic diagnostic devices, implanted devices, human-computer-interface, bioinstrumentation and neuromorphic engineering. Topics covered span from the bioelectromagnetism & related applications to regulatory aspects (IEC standards and TGA/FDA approval processes) and electrical safety of instrumentation. This unit will have a strong practical design focus with laboratories and tutorials focused on the design of real instrumentation (including manufacturing) dealing with real biomedical signals.

301121.1 Biomedical Signals and Data Analysis

Credit Points 10 **Level** 3

Assumed Knowledge

Basic programming skills.

Special Requirements

Students must be enrolled in the 3740 Bachelor of Engineering (Honours) program.

....

This unit will cover recent advances in biomedical signal and data analysis including electrocardiography, electroencephalography, human-computer-interface, electromyography, biomedical images and spikes processing. Topics covered span from basic to advanced signal processing. This unit will have a strong practical design focus with laboratories and tutorials focused on the design of usable software packages dealing with real biomedical signals.

200263.5 Biometry

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics or equivalent

Equivalent Units

200192 - Statistics for Science, 300700 - Statistical Decision Making, 200032 - Statistics for Business, 200052 - Introduction to Economic Methods, 700033 - Biometry (UWSC), 700041 - Statistical Decision Making (UWSC), 30123 - Management Analytics

Incompatible Units

200182 - Quantitative Techniques

....

Biometry introduces students to various statistical techniques necessary in scientific endeavours. Presentation of the content will emphasize the correct principles and procedures for collecting and analysing scientific data, using a hands-on approach. Topics include effective methods of gathering data, statistical principles of designing experiments, error analysis, describing different sets of data, probability distributions, statistical inference, non-parametric methods, simple linear regression and analysis of categorical data.

401002.1 Bioscience 1

Credit Points 10 **Level** 1

Equivalent Units

400746 - Understanding Good Health

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4684 Bachelor of Midwifery. Unitrack students may study this unit as a miscellaneous unit.

....

This unit introduces student nurses and midwives to the terminology and major introductory concepts related to normal structure and function of the human body and its relationship to performances of activities of living and healthy lifestyle practices.

401006.1 Bioscience 2

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of the human body systems, growth and development, homeostasis and the relationship to health, activities of living and the National Health Priorities.

Equivalent Units

400750 - Introduction to Health Breakdown

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced). Unitrack students may study this unit as a miscellaneous unit.

....

This unit extends knowledge gained in Bioscience 1 and introduces nursing students to concepts associated with alterations in health and wellness as a consequence of life transition. It includes an introduction to pathophysiology, pharmacology, immunology and microbiology. The unit also focuses on the impact of microorganisms on the health of people and the body's natural defences in dealing with infections and injuries and its significance for nursing.

401031.1 Bioscience for Midwifery

Credit Points 10 **Level** 1

Prerequisite

401002.1 Bioscience 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit extends knowledge gained in Bioscience I and introduces midwifery students to concepts associated with early human development, labour, birth and postpartum changes. Physiological changes in the newborn at birth are identified together with growth and development to six

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 288

weeks of age. The unit includes an introduction to principles of pharmacology and pharmacological agents that may be used as a supportive resource during pregnancy and birth.

401104.1 Block Clinical Practicum

Credit Points 10 **Level** 4

Assumed Knowledge

It is assumed the student will have a thorough knowledge of TCM theory, acupuncture and Chinese herbal medicine and have completed all (or close to all) clinical hours under supervision. . As a core competency in registered TCM practice this is not a suitable unit for other health disciplines.

Incompatible Units

400927 - Block Clinical Practicum (PG) AND 400363 - Block Clinical Practicum

Special Requirements

Must be enrolled in Traditional Chinese Medicine course.

....

This unit provides the student with intensive, supervised clinical practice experience. Arrangements will be made for students to complete this stage in China. This will involve students paying their own travel fares, as well as, training and accommodation fees to the Chinese institution. This unit represents the final clinical practicum stage and development of clinical skills. Students will be expected to demonstrate competence in handling patients in a clinical context, and manage their integrated care using Traditional Chinese Medicine.

300836.1 Botany

Credit Points 10 **Level** 2

Assumed Knowledge

Basic knowledge of biology, chemistry and ecology.

Prerequisite

300802.1 Biodiversity

Equivalent Units

BI103A - Botany; 300328 - Botany

....

From microscopic algae to giant flowering angiosperms, this unit develops students knowledge and understanding of plants on earth. The unit covers the topics of plant anatomy and morphology, classification and systematics, and evolution. Students will examine the major groups of plants: green algae, bryophytes, lycophytes, monilophytes, gymnosperms and angiosperms. Laboratory and field work involves the study of common Australian plants and economically significant plants.

101684.3 Brain and Behaviour

Credit Points 10 **Level** 2

Equivalent Units

100931 - Neuroscience

Special Requirements

The online version of this unit is only available to students enrolled in 1793 - Bachelor of Science, Criminology and Psychological Studies.

....

This unit provides an introduction to the biological and neuroscientific bases of human behaviour. Topics covered include the chemistry of life, the molecular basis of life, the cell and some of the major organ systems of the human body with particular reference to the nervous, endocrine and sensory systems. The unit has a significant laboratory component which reinforces lecture and text material. Students will be introduced to the biological and neuroscientific concepts necessary for a thorough understanding of areas of psychology such as abnormal psychology, cognitive processes, developmental psychology, human learning, and physiological psychology.

200088.3 Brand and Product Management

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of market research and an understanding of the core principles of consumer behaviour.

Prerequisite

200083.2 Marketing Principles

....

Brand and Product Management focuses on the role brands and products play in the planning and execution of marketing strategies. Aspects of brand and product management include the building, implementation and maintenance of brands within a range of different contexts are covered in this unit. Students will develop a critical view of the inherent challenges firms encounter in creating and maintaining brands from a marketing perspective. This unit uses workshop sessions and online activities to create an interactive learning environment and bring the content to life.

101756.1 Bridging the Gap: Re-engaging Indigenous Learners

Credit Points 10 **Level** 3

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

Equivalent Units

101116 - Issues in Aboriginal Education

....

This unit is available to all undergraduate students who have open electives. Bridging the Gap: Re-engaging Indigenous Australian Learners will provide students with knowledge and skills to develop teaching strategies that will bridge the education gaps existing for many Indigenous Australian (Indigenous) learners. Students will gain knowledge of quality teaching frameworks to engage all learners and in particular Indigenous learners. The unit will also increase students' awareness of the complexities of the cultural inter-relationships between many Indigenous and non-Indigenous learners. The unit focuses on

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 289

empowering students to effectively teach: Indigenous Australians; Indigenous studies in consultation with Indigenous communities; and assess as well as evaluate resources for use in teaching Indigenous studies.

102079.1 Britain in the Age of Botany Bay, 1760-1815

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit introduces the social, economic, political and cultural forces that shaped the society from which the first white Australians came. It considers processes of historical change and uses primary sources to explore historical debates concerning these changes. Themes covered include social class; sex and gender; crime and punishment; industrial revolution, urbanisation, and public health; the public sphere; political life; war, militarisation, and empire. This unit places special emphasis on the use of digitised primary sources, training students in their use. It also requires an extended piece of original primary source-based historical research. The unit spans the period 1760-1815.

400621.2 Bugs and Drugs

Credit Points 10 **Level** 2

Assumed Knowledge

Basic understanding of structure and function of systems within the human body.

....

Throughout history humans have sought to control their well-being whether it be in response to disease-producing microbes or situations inherent in modern day life. This unit examines an eclectic range of treatments and technologies. Some have been triggered by ancient and enduring infectious foes such as smallpox and the plague or emerging menaces including Ebola and SARS. Others are nested within contemporary living and may be constructed as communicable in the social sense. Selected issues will be explored including agents utilised in the alteration of sensory perception including hallucinogens as well as reaction to and manipulation of body image.

300706.2 Building 1

Credit Points 10 **Level** 1

Equivalent Units

BG101A - Building 1, 700070 - Building 1 (UWSC)

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course or specialisation.

....

This unit provides students with an overview of regulations and construction techniques with an emphasis on low-rise residential buildings in the Australian context. It covers general process; building regulations; environmental issues; surveying techniques; structural elements (footings,

framing and bracing); envelope; services; fit-out and finishes.

700070.1 Building 1 (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300706 - Building 1

Special Requirements

Students must be enrolled at UWSCollege.

....

This unit provides students with an overview of regulations and construction techniques with an emphasis on low-rise residential buildings in the Australian context. It covers general process; building regulations; environmental issues; surveying techniques; structural elements (footings, framing and bracing); envelope; services; fit-out and finishes.

700070.2 Building 1 (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300706 - Building 1

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit provides students with an overview of regulations and construction techniques with an emphasis on low-rise residential buildings in the Australian context. It covers general process; building regulations; environmental issues; surveying techniques; structural elements (footings, framing and bracing); envelope; services; fit-out and finishes.

300707.2 Building 2

Credit Points 10 **Level** 1

Equivalent Units

BG103A - Building 2; 700071 - Building 2 (UWSC)

....

The aim of this unit is to provide students with an overview of the design, classification, applicable Australian Standards, structural systems, construction techniques, materials handling systems, building services, fit-out and finishes for larger scale buildings.

700071.1 Building 2 (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300707 - Building 2

Special Requirements

Students must be enrolled at UWSCollege.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 290

The aim of this unit is to provide students with an overview of the design, classification, applicable Australian Standards, structural systems, construction techniques, materials handling systems, building services, fit-out and finishes for larger scale buildings.

700071.2   Building 2 (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300707 - Building 2

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

The aim of this unit is to provide students with an overview of the design, classification, applicable Australian Standards, structural systems, construction techniques, materials handling systems, building services, fit-out and finishes for larger scale buildings.

301087.1   Building Design Process

Credit Points 10 **Level** 3

Prerequisite

301086.1 Design Brief Formulation

....

Building design is an iterative process. In this unit students will gain experience in generating design proposals and responding to simulated client and stakeholder feedback. Holistic designsolutions that address economic, environmental and social issues (triple bottom line assessment) will be generated for realistic building projects.

301099.1   Building Design Project 1

Credit Points 20 **Level** 4

Assumed Knowledge

Students should be familiar with the content from the first three years of the Building Design Management degree, including expertise in CAD, iterative design process and construction technology.

Prerequisite

301087.1 Building Design Process

Incompatible Units

301101 Building Design Project 1 (Honours)

Special Requirements

Enrolment is restricted to students in 3727 Bachelor of Building Design Management. Students should have completed 220 credit points.

....

In this unit students will source a suitable design project to complete as a capstone work which illustrates the skills they have developed throughout their study program. The project will contain a level of complexity exceeding that of previous building designs produced in the program. Diverse

stakeholder input on the projects impact will be gathered and assessed.

301101.1   Building Design Project 1 (Honours)

Credit Points 20 **Level** 5

Assumed Knowledge

Students should be familiar with the content from the first three years of the Building Design Management degree, including expertise in CAD, iterative design process and construction technology.

Prerequisite

301087.1 Building Design Process

Incompatible Units

301099 Building Design Project 1

Special Requirements

Enrolment is restricted to students in 3727 Bachelor of Building Design Management.

....

In this unit, students who have a record of superior performance in the Building Design Management program, will source a suitable design project at their own initiative, to complete as a capstone work which illustrates the skills they have developed throughout their study program. The project will contain a high level of complexity exceeding that of previous building designs produced in the program. Both the complexity level and the number of design constraints will distinguish the project undertaken for this unit from the non-honours stream unit. Diverse stakeholder input on the project's impact will be gathered and assessed. The design solution generated will show mastery of complex design problems which integrate technical knowledge with economic and social responsibility. Superior skill in resolving design conflicts will be demonstrated.

301100.1   Building Design Project 2

Credit Points 20 **Level** 4

Assumed Knowledge

Students should be familiar with the content from the first three years of the Building Design Management degree, including expertise in CAD, iterative design process and construction technology.

Prerequisite

301099.1 Building Design Project 1

Incompatible Units

301102 Building Project 2 (Honours)

Special Requirements

Enrolment is restricted to students in 3727 Bachelor of Building Design Management. Students should have completed 260 credit points of study.

....

In this unit students will develop the design solution they created in Building Design Project 1 into a fully resolved CAD model suitable for costing, scheduling and contracting. Construction Certificate documentation will be generated.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 291

301102.1 Building Design Project 2 (Honours)

Credit Points 20 **Level** 5

Assumed Knowledge

Students should be familiar with the content from the first three years of the Building Design Management degree, including expertise in CAD, iterative design process and construction technology.

Prerequisite

301101.1 Building Design Project 1 (Honours)

Incompatible Units

301100 Building Design Project 2

Special Requirements

Enrolment is restricted to students in 3727 Bachelor of Building Design Management.

....

In this unit, students who have a record of superior performance in the program will continue to develop the design solution they created in Building Design Project 1 (Honours) into a fully resolved CAD model suitable for costing, scheduling and contracting. Construction Certificate documentation of professional standard will be generated. Both the complexity level and the number of design constraints will distinguish the project undertaken for this unit from the non-honours stream unit. Diverse stakeholder input on the projects impact will be gathered and assessed. Complex constraints relating to buildability and efficient project delivery will be resolved. Strict budgetary constraints will be imposed and students will be expected to demonstrate a capacity to use lateral thinking and generate creative solutions in response to problematic situations which arise during project delivery but which were unknown at project commencement.

200292.2 Building Law

Credit Points 10 **Level** 3

Equivalent Units

LW305A - Building Law 2

....

This unit is designed to provide students with a good understanding of the law and dispute resolution mechanisms that regulate the conduct of the building industry and building practices e.g. Occupational health and safety, contract law, workers compensation, awareness of industrial relations and dispute resolution.

300885.1 Building Regulations Studies

Credit Points 10 **Level** 2

Equivalent Units

BG302A - Building Regulation Studies, 300722 - Building Regulation Studies

....

This unit develops an awareness of the regulations used to control risk in buildings. Major sources of risk, such as fire and public health, are identified and controlled. Building regulations of high risk regions, such as cyclonic, seismic and bushfire-prone areas, are also discussed. The unit emphasises the safety of vulnerable occupants, such as young children, disabled people and the elderly. The unit also explores recent developments in the National Construction Code (NCC: formerly BCA) concerning energy efficiency.

301085.1 Built Heritage

Credit Points 10 **Level** 2

....

This unit explores the history of building design in Australia and applies this contextual knowledge to the design of additions to existing buildings, as well as, to infill development in heritage areas. Built form, scale, materials, finishes and streetscape are considered so that new structures complement rather than detract from existing heritage buildings. The appropriateness of preservation, restoration, renovation, retrofit and adaptation strategies for older buildings is examined in the context of market and regulatory constraints on built heritage.

200896.1 Business Analysis Seminars

Credit Points 10 **Level** 5

Special Requirements

Students must be enrolled in course 8083 Bachelor of Research Studies/Master of Research.

....

This unit introduces students to exemplary research in selected contemporary issues in business practice and policy. Presented through a series of seminars by leading business academics, selected issues will be examined in terms of the competing definitions of the problem, the methods of analysis to be used to address the problem, components of the problems and relationships to other contemporary issues. As business research is inherently inter-disciplinary and involves multiple stakeholders, relevant and competing theoretical perspectives explaining selected issues will be examined. Different methods of investigation and analysis of issues will be evaluated.

700206.2 Business Studies (WSTC Prep)

Credit Points 10 **Level** Z

Equivalent Units

900023 - Business Studies (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit aims to develop an understanding of some of the key concepts, relationships and principles underpinning the operations of business in modern societies. At the same time, it is designed to develop a degree of competence in a suite of skills to prepare students for undergraduate study in business and to enable them to act responsibly and effectively in the local and global business environment.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 292

200091.3 Business to Business Marketing

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge of marketing concepts, theories and frameworks

Prerequisite

200083.2 Marketing Principles

Equivalent Units

MK318A - Business-to- Business Marketing, 61723 - Business-to-Business Marketing

....

Unlike consumer marketing where an individual makes decisions based on their own needs or those of their household, business-to-business (B2B) marketing involves individuals or companies promoting and selling products and/or services to other companies. This unit encompasses all these aspects of B2B marketing including organisational buying behaviour, B2B market research, management of the marketing mix from a B2B perspective, relationship and network marketing, supply chain management and Customer Relationship Management (CRM) strategies, and business marketing strategy.

200158.4 Business, Society and Policy

Credit Points 10 **Level** 2

Equivalent Units

700093 - Business, Society and Policy (UWSC)

Special Requirements

Successful completion of 30 credit points.

....

Business organisations influence and evolve through ongoing social, political and technological change. Taking the perspective that businesses both affect and are affected by government and society, the unit examines the complexities of interactions between three sectors: business, society and government. The unit emphasises the social responsibility of business. The different ideologies used to legitimise the actions of business, the responses from society and the role of government (local, transnational and global) in regulating interactions, are critically evaluated.

400984.1 Cardiorespiratory Physiotherapy

Credit Points 10 **Level** 3

Prerequisite

400982.1 Core Competencies in Physiotherapy Practice AND **400981.1** Clinical Pharmacology AND **400870.1** Population Health and Society AND **400864.2** Research Methods (Quantitative and Qualitative)

Corequisite

400983.1 Orthopaedic Physiotherapy AND **400986.1** Neurological Physiotherapy AND **400985.1** Clinical Education A

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy or Graduate Entry Master of Physiotherapy programs. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff. Students cannot enrol in Year 3 Physiotherapy units until they have completed 160 credit points in the Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs.

....

This unit builds on the knowledge and skills developed in the first two years of physiotherapy study. It focuses on client assessment and evidence-based management in acute cardiorespiratory physiotherapy contexts. This will require strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include introductory skills in cardiorespiratory physiotherapy assessment, interpretation and prioritisation of findings along with the implementation and evaluation of appropriate treatment strategies.

101916.1 Case Studies in Philosophy: Text

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit involves an in-depth study of a major philosophical text, such as Spinoza's Ethics, Kant's Critique of Pure Reason, or Heidegger's Being and Time etc. The close reading and discussion of seminal philosophical texts are important parts of advanced philosophical study, developing the capacity to read and think deeply about the particular problem or focus dealt with in the text. Students will follow the text step by step, gaining an understanding of its significance, and the issues and problems it solved or generated.

101914.1 Case Studies in Philosophy: Thinker

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit involves detailed study of a significant philosopher. It will focus on the most important texts by a well-known philosopher, and any other writings that aid an understanding of their contribution and importance - to philosophical tradition, but also culture and society. The

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 293

careful study of a single philosopher is an essential practice for advanced philosophical inquiry. The topics explored will vary based on the philosopher and texts being studied, as chosen by the staff member teaching the unit.

300816.1 Cell Biology

Credit Points 10 **Level** 1

Assumed Knowledge

Basic understanding of biology and chemistry

Equivalent Units

300543 - Cell Biology, 300793 - Biology B - Cellular Processes, 300221 - Biology 1

Special Requirements

Students require safety glasses, labratory coat and labratory book.

....

Cells are the most basic form of all life, and underlying normal cell function are the molecules used to build complex cellular structures, generate energy, and propagate dynamic life. The unit will study the fundamental processes through which key biomolecules, including lipids, carbohydrates, amino acids and nucleic acids are manipulated to generate and store energy, and build a broad array of important biological macromolecules including DNA, membranes and proteins. To sustain life, cells respire for energy and replicate for growth and sexual reproduction. Accordingly the unit will examine cellular respiration, transcription, translation, mitosis, meiosis, transmission and how genes are inherited and modified providing insight into the phenomena of life. The role of DNA technologies in the fields of medicine, biotechnology and environmental science will provide students with real world applications.

700125.2 Cell Biology (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic understanding of biology and chemistry

Equivalent Units

300543 - Cell Biology, 300793 - Biology B – Cellular Processes, 700034 - Cell Biology (UWSC), 300816 - Cell Biology

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

Cells are the most basic form of all life, and underlying normal cell function are the molecules used to build complex cellular structures, generate energy, and propagate dynamic life. The unit will study the fundamental processes through which key biomolecules, including lipids, carbohydrates, amino acids and nucleic acids, are manipulated to generate and store energy, and build a broad array of important biological macromolecules including DNA, membranes and proteins. To sustain life, cells respire for energy and replicate for growth and sexual

reproduction. Accordingly the unit will examine cellular respiration, transcription, translation, mitosis, meiosis, transmission and how the genetic code is inherited and modified providing students insights into the phenomena of life. The role of DNA technology in the fields of medicine, biomolecular plant and animal science, food, forensic and environmental science will provide students with real world applications.

400874.3 Channels and Points 1

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to Theories of Traditional Chinese Medicine 1.

Equivalent Units

400347 - Acupuncture 1

Special Requirements

Students must submit National Police Check, Working with Children Check and First Aid Certificate.

....

Acupuncture is one of the principal therapeutic interventions in Traditional Chinese Medicine (TCM). This unit introduces students to acupuncture theory and practice, and provides opportunity to develop practical skills. It covers the theory of channels and points, channel pathway, point location and indication of the three yin/yang channels of hand and points, and the three yin channels of foot and points. This unit also expands upon the student's understanding of TCM theory and practice principles.

400875.2 Channels and Points 2

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to Channels and Points 1.

Equivalent Units

400347 - Acupuncture 1

....

Acupuncture is one of the principal therapeutic interventions in Traditional Chinese Medicine (TCM). This unit completes the study of system of channels and points, which forms the basis of clinical application of acupuncture. It covers the channel pathway, point location and indication of the three yang channels of foot and points, and Du and Ren channels and points. It also introduces the points of ear and scalp acupuncture. This unit expands upon the student's understanding of TCM theory and practice principles.

400162.3 Child and Adolescent Occupations

Credit Points 10 **Level** 3

Prerequisite

400912.1 Occupational Therapy Process

Special Requirements

Students must be enrolled in Course 4663 Bachelor of Health Science/Master of Occupational Therapy or 4664 Master of Occupational Therapy or 4711 Bachelor of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 294

Occupational Therapy or 4712 Bachelor of Occupational Therapy (Honours). To be able to enrol in this unit, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff.

....

Students learn about paediatric and adolescent occupational therapy practice in different practice settings. This unit examines child development and explores the occupations of childhood and adolescence. Occupational therapy models, frames of reference, assessments and interventions are applied to practice scenarios. Family-centred practice is a key focus of this unit. There will be a self directed and reflective learning approach in this unit.

102205.1   Children's and Young Adult Fiction

Credit Points 10 **Level** 3

Equivalent Units

101242 - Children's Literature

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit explores a wide range of fictional texts created for children, teenagers and young adults from folktales, fairytales and myths to contemporary examples. It focuses on the relationship between young people, the texts created for them and the cultures in which these texts are produced and read. The unit will examine a variety of genres and themes, for example, the experience of childhood as constructed by adult authors of children's texts; post-colonial children's literature; the emergence and development of distinctly Australian children's texts; the development of young adult; literature; the impact of new technologies on children's literature; and role of art in children's literature.

101265.3   Children's Culture

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit explores the concept of children's culture and the diversity of cultures to which children belong. The unit focuses on current debates about childhood and children's culture, including the rise of children's consumer culture. Students will gain insights into children's lives and culture by critically engaging with a variety of objects and institutions that are part of children's lives, for example,

toys, videogames, children's television programs, films and books. The unit will also examine the role of adults in children's culture, including in marketing and advertising to children.

101626.5   Children's Literature: Image and Text

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit focuses on the interrelationships between image and text in children's literature. The unit examines both picture books and other image-based children's texts, including electronic texts and graphic novels. The unit will examine children's texts as cultural artefacts, theories of visual literacy and how image and text combine to create meaning. Students will have the opportunity to create their own picture book for their final project.

100056.2   Chinese 101

Credit Points 10 **Level** 1

....

The unit is offered in Autumn at Penrith for students enrolled in Course 1671 Bachelor of Social Science (Pathway to Early Childhood Teaching). This unit is an introduction to the (Mandarin) Chinese language as well as aspects of Chinese culture which are necessary for language competency, using Pinyin and simplified characters. It is intended for students who are not from a Chinese-speaking background and who are at beginner level in all four skills -listening, speaking, reading and writing in Modern Standard Chinese. Components of this unit may be presented in English.

100057.2   Chinese 102

Credit Points 10 **Level** 1

....

This is a post-beginner level unit in (Mandarin) Chinese intended for those with knowledge of Chinese 101 or equivalent. This unit builds on the knowledge and skills developed in (Mandarin) Chinese 101 and aims to further develop listening, speaking, reading and writing skills in elementary Modern Standard Chinese. The unit includes a socio-cultural component which will examine some aspects of China and Chinese culture as well as the Chinese community in Australia.

102024.1   Chinese 201

Credit Points 10 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Chinese Language at Level 1 or equivalent.

Equivalent Units

101700 - Language and Communication Skills 2A: Chinese

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 295

This is a post-beginner unit for intermediate level study of modern Chinese (Mandarin) language and its culture, suitable for Post HSC entry or an equivalent level. This unit is designed for students who take it as part of the Chinese major/sub-major or as an elective unit. It will further develop the Pinyin system and the four core skills (listening, speaking, reading and writing), with a particular focus on core vocabulary and fundamental structures, using approximately 500 simplified Chinese characters. Aspects of culture and language acquisition strategies are explored through research projects. Differentiated learning and assessment tasks and multimedia activities are utilised to cater to non-background and quasi-background learners. NOTE: Students enrolling in this unit as part of a major or sub major in Chinese must enrol in Chinese 202 at the same time.

102025.1   Chinese 202

Credit Points 10 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Chinese Language at Level 1 or equivalent.

Equivalent Units

101700 - Language and Communication Skills 2A: Chinese

....

This is a post-beginner unit for intermediate level study of modern Chinese (Mandarin) language and its culture suitable for Post Beginners or an equivalent level. Students can take it as part of a major/sub-major or as an elective unit. It aims to develop listening and speaking skills in a real communicative setting. Students will learn Pinyin, vocabulary, expressions and grammatical structures in a wide range of daily situations. In addition, students will have the chance to learn and research on some interesting aspects of Chinese culture. Differentiated learning and assessment tasks and multimedia activities are utilised to cater to non-background and quasi-background learners. NOTE: Students enrolling in this unit as part of a major or sub major in Chinese must enrol in Chinese 201 at the same time

102026.1   Chinese 203

Credit Points 10 **Level** 2

Assumed Knowledge

Successful completion of 20 credit points of Chinese Language at Level 1 or equivalent.

Equivalent Units

101705 - Language and Communication Skills 2B: Chinese

....

This is an intermediate level unit of modern Chinese (Mandarin) language and its culture suitable for students who undertake it as part of the Chinese major or sub-major or as an elective subject. It further develops students' language skills acquired in Chinese 201 and 202 to a level of proficiency to satisfy their general social needs. While students' aural/oral skills are further developed, emphasis is placed on reading and writing. A working knowledge of approximately 800 simplified Chinese characters is developed. Aspects of Chinese culture and society are explored through research work. Differentiated learning and assessment tasks and multimedia activities are utilised to cater to non-background and quasi-background learners. NOTE: Students enrolling in this unit as part of a major or sub major in Chinese must enrol in Chinese 204 at the same time

102027.1   Chinese 204

Credit Points 10 **Level** 2

Equivalent Units

101705 - Language and Communication Skills 2B: Chinese

Special Requirements

Successful completion of 20 credit points of Chinese Language at Level 1 or equivalent.

....

This is an intermediate level unit of modern Chinese (Mandarin) language and its culture suitable for students who undertake it as part of the Chinese major or sub-major or as an elective subject. It provides an extension of reading comprehension and writing skills over a range of written registers. The content is selected from contemporary materials (e.g. songs and rhymes, fables and idioms, magazines, short stories and websites). This unit also fosters cultural and social understanding by presenting aspects of contemporary cultures and societies through language use and research work. Differentiated learning and assessment tasks and multimedia activities are utilised to cater to non-background and quasi-background learners. NOTE: Students enrolling in this unit as part of a major or sub major in Chinese must enrol in Chinese 203 at the same time

101951.1   Chinese 301

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of 40 credit points of Chinese language at Level 2 or equivalent

Equivalent Units

101710 - Languages and Grammatical Concepts 3A: Chinese

....

This is an advanced level 3 unit within the Chinese major program, designed for students who have acquired an intermediate level of proficiency, and who wish to consolidate and improve their language proficiency and understanding of Chinese culture. It further develops students' proficiency in both spoken and written Chinese, and enhances their comprehension of Chinese language, culture and society. Students are encouraged to express their own opinions in a wide range of social and cultural contexts. Interactive lecture/tutorials, online activities and authentic materials are used to facilitate a positive learning experience.

100063.2   Chinese 302

Credit Points 10 **Level** 3

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 296

This unit further develops students' proficiency in both spoken and written Chinese acquired in 100062 - Chinese 301, with an emphasis on oral expression, reading and writing skills. It enhances students' ability to interact with native speakers in both spoken and written Chinese in various situations, and expands their understanding of Chinese culture. Some authentic materials are used in order to enhance students' understanding of the language in its cultural context and their ability to interact in similar settings.

100064.2 Chinese 303: Twentieth-Century Chinese Literature

Credit Points 10 **Level** 3

....

This unit introduces students to modern and contemporary Chinese literature in the Chinese language. It includes a brief overview of Twentieth-century Chinese literature, and exposes students to a variety of literary genres. Students are expected to work individually and in groups in order to analyse, evaluate and critique these works, whose social and cultural context is integral to understanding them. This process will not only increase students' understanding and appreciation of Twentieth-century Chinese literature, but it will also develop their critical thinking skills.

100065.2 Chinese 304: Chinese Classical Literature

Credit Points 10 **Level** 3

....

This unit introduces students to Chinese classical literature in the Chinese language. It includes a brief overview of Chinese classical literature and exposes students to the prose, poetry, drama and fiction genres of Chinese classical works from the Han dynasty to the Qing dynasty. Through selected readings, students will gain some knowledge of the stylistic and linguistic features of classical prose and develop skills in reading classical Chinese. Students will also develop an understanding of the Chinese literary tradition and an appreciation of the continuing relevance of classical Chinese in contemporary China.

100066.2 Chinese 305: Chinese Cinema

Credit Points 10 **Level** 3

....

This unit offers a brief review of Chinese film and introduces some of the best Chinese-language productions of the last two decades from mainland China and Taiwan. Students will be required to work individually and in groups to critique the social and moral issues raised in these films. They will also consider the historical context from which these films emerged. This process will develop a deeper understanding of Chinese society and the lives of Chinese people of different eras. It will also enhance students' appreciation of Chinese cultural identity and moral values.

100510.2 Chinese 306: Traditional Chinese Thought

Credit Points 10 **Level** 3

....

This unit introduces students to the heritage of Chinese philosophical thought, and briefly traces its historical development. Students read selected works of prominent Chinese thinkers in their original versions, or in modern Chinese or English versions. They are expected to interpret these works in their Chinese context as well as from a western perspective. Students will develop an understanding of the part the various schools of philosophy have played in forming the cultural identity and social reality of traditional and contemporary China. The unit is conducted in Chinese.

100067.2 Chinese 307: The Cultural Context of China

Credit Points 10 **Level** 3

....

This unit provides a brief overview of Chinese culture and examines the cultural interchanges of which it has been a part throughout history. Students will analyse the effects of these cultural contacts, both positive and negative. They will also evaluate and critique relevant cultural issues, from a comparative perspective. This process will increase students' understanding of the cultural identity of China, and it will also enable them to appreciate the importance of outside cultural influences, thereby reinforcing an open and mature attitude towards multiculturalism. The unit will be conducted in Chinese.

401098.1 Chinese Internal Medicine 1

Credit Points 10 **Level** 4

Assumed Knowledge

It is assumed the students will have a thorough knowledge of TCM theory, acupuncture and Chinese herbal medicine as a foundation for this unit.

Incompatible Units

700918 - Chinese Internal Medicine 1 (PG); 400360 - Chinese Internal Medicine 1

Special Requirements

Students must be enrolled in course 4710 - Bachelor of Traditional Chinese Medicine.

....

The study of internal medicine forms the basis of clinical practice in Traditional Chinese Medicine (TCM). This unit begins to bridge the gap between theory and practice. It enables the health professional to analyse, diagnose and treat common internal diseases with both acupuncture and herbal medicine and using a TCM approach. The focus of this unit is on the analysis of major presenting symptoms.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 297

401102.1 Chinese Internal Medicine 2

Credit Points 10 **Level** 4

Assumed Knowledge

It is assumed the student will have a thorough knowledge of TCM theory, acupuncture and Chinese herbal medicine and have completed a significant number of clinical hours under supervision. As a core competency in registered TCM practice this is not a suitable unit for other health disciplines.

Incompatible Units

400922 - Chinese Internal Medicine 2 (PG) AND 400360 - Chinese Internal Medicine 2

Special Requirements

Must be enrolled in Traditional Chinese Medicine course.

....

This unit builds on Chinese Medicine 1 and extends the student's ability to analyse, diagnose and treat common and difficult diseases in internal medicine with both acupuncture and herbal medicine and using a TCM approach. Students will develop an understanding of the causes and pathophysiological mechanisms of a wide range of diseases.

400876.2 Chinese Materia Medica 1

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to Traditional Chinese Medicine 1.

Equivalent Units

400349 - Chinese Herbal Medicine 1

....

Herbal medicine is one of the principal therapeutic interventions in Traditional Chinese Medicine. This unit introduces students to the therapeutic and reference organisation of Chinese medicinal herbs, and enables students to commence using the materia medica. It covers the commonly used herbs in each of the six categories of the Chinese materia medica, including the herbal properties, actions, indications, contraindications, combined usage as well as herbal dispensing. This unit also expands upon the student's understanding of TCM theory and practice principles.

400877.2 Chinese Materia Medica 2

Credit Points 10 **Level** 2

Assumed Knowledge

Assumed knowledge equivalent to Chinese Materia Medica 1.

Equivalent Units

400351 - Chinese Herbal Medicine 2

....

This unit completes the study of Chinese medicinal herbs, which forms the basis for Chinese herbal medicine. It covers the commonly used herbs in each of the twelve categories of the Chinese materia medica, including the herbal properties, actions, indications, contraindications and combined usage. It also introduces the basic knowledge of herbal pharmacognosy. This unit also expands upon the student's understanding of Traditional Chinese Medicine theory and practice principles.

400878.2 Chinese Medicinal Formulas

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge equivalent to Chinese Materia Medica 1 and 2.

Equivalent Units

400351 - Chinese Herbal Medicine 3

Special Requirements

Prior to enrolling in this unit, students must have completed National Police Check, Working with Children Check and the first aid certificate.

....

Herbal medicine is the principal therapeutic intervention in Traditional Chinese Medicine (TCM). This unit follows from Chinese Materia Medica 1 & 2, and begins the study of major Chinese herbal formulas, which form the basis for clinical prescribing in Chinese herbal medicine. The focus of this unit is to compare and contrast the main formulas in specified categories, and to analyse the specific actions of the herbs that make up the formula. Students will be required to formulate, assemble and prepare complex prescriptions. This unit expands upon the student's knowledge of the Chinese Materia Medica, as well as the understanding of TCM theory and practice principles.

102192.1 Cinema and Censorship

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Censorship of the arts has long been a contentious issue. This unit examines the cultural contexts and debates surrounding censorship, as well as the institutions, policies, and people that figure prominently in the history of cinema censorship. Censorship discourses reveal shifts in how 'national morality' is constructed, and often display cultural anxieties about changing meanings of gender, sexuality, race, and class. This unit offers an historical survey of film censorship from the 1890s to today, utilising various theoretical approaches (feminist theory, critical race theory, queer theory, and cultural theory), with an emphasis on topics such as obscenity, pornography, violence, and blasphemy.

101984.1 Cinema and Experience

Credit Points 10 **Level** 3

Equivalent Units

63062 - Film, Genre and Affect, 100256 - Film and Affect

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 298

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Film Studies and Literary Studies share common theoretical foundations and analytical methods. However, considered in its cultural contexts, the question of how a film is experienced by spectators becomes critical. Films engage spectators in an embodied and affective way. The unit will argue that we cannot understand how a film takes up thematic and cultural questions without exploring the dynamics of spectatorship. This unit will explore how narrative, genre, character, and thematic and cultural questions are shaped into sensory-affective experience through specifically cinematic textual strategies. Crossovers and divergences between literary, cultural studies and film studies methodologies will be explored.

300005.2   Circuit Theory

Credit Points 10 **Level** 2

Assumed Knowledge

Content contained in 200238 - Mathematics for Engineers 2. Ordinary Differential Equations, inlcuding first and second order. Laplace transforms: definition, inverse transform, s-shift, unit step function and Dirac delta function, transform of a derivative, solving differential equations.

Prerequisite

300021.2 Electrical Fundamentals

....

This unit aims to equip the student with the tools needed for the design and analysis of electrical and electronic circuits. It also introduces various techniques of circuit analysis, mutual coupling, frequency response and two-port networks.

700243.1   Circuit Theory (WSTC AssocD)

Credit Points 10 **Level** 2

Assumed Knowledge

Ordinary Differential Equations, including first and second order. Laplace transforms, definition, inverse transform, s-shift, unit step function and Dirac delta function, transform of a derivative, solving differential equations.

Prerequisite

700104.2 Electrical Fundamentals (WSTC AssocD)

Equivalent Units

300005 - Circuit Theory

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit aims to equip the student with the tools needed for the design and analysis of electrical and electronic circuits. It also introduces various techniques of circuit analysis, convolution, mutual coupling, frequency response and two-ports loops.

101589.2   Cities: Introduction to Urban Studies

Credit Points 10 **Level** 1

Equivalent Units

101342 - The Urban Context

....

This unit is a keystone in the Geography and Urban Studies major. It aims to introduce students to the major urban challenges that will shape our society in the future and to the major substantive concerns in the field of urban management and planning It will develop students' understanding of how their own urban experiences are shaped by broader historical, cultural, economic, and social forces, and will enable students to compare the Australian urban context and issues with those in other world regions.

101968.1   Civil Society in Contemporary China

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit is intended to give students an understanding of the social development of the People's Republic of China (PRC). It will engage with some of the key concepts that scholars have utilised to understand social changes. In this vein, the unit will consider China's socio-political transformation from a civil society perspective. It will consider a range of stakeholders - from non-governmental organisations to trade associations - and examine the events that have contributed to the development of China's civil society.

300930.1   Classical Physics and Advanced Technologies

Credit Points 10 **Level** 2

Assumed Knowledge

Introductory mechanics: Newton's laws, work, conservation of energy and momentum. Introductory Electrostatics: Electric forces and Coulomb's law; DC electricity, voltage, current, resistance, Ohm's law, electric power, circuit laws. Introduction to Magnetic fields: production by magnets & currents, magnetic forces on currents & charges; Induced EMF, Faraday's law and electrical generators; AC current & voltage, peak & rms values, capacitance and inductance.

Prerequisite

300829.1 Physics 2

Equivalent Units

300413 - Applied Instrumentation in Nanotechnology

....

This unit explains in depth aspects of classical mechanics related to forced and damped oscillations. Physical waves are introduced and formalized by describing applications of the wave equation to mechanical systems and electromagnetic radiation. Interference and diffraction are

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 299

detailed using electromagnetic fields (physical optics). Main technological applications of mechanical oscillations and electromagnetic waves are also explained, such as the atomic force microscope, laser, optical tweezers and the zeta-sizer.

401100.1   Classical Texts in Chinese Medicine

Credit Points 10 **Level** 4

Assumed Knowledge

It is assumed the student will have a thorough knowledge of TCM theory, acupuncture and Chinese herbal medicine and have completed a significant number of clinical hours under supervision. As a core competency in registered TCM practice this is not a suitable unit for other health disciplines.

Incompatible Units

400969 - Classical Texts in Chinese Medicine (PG)

Special Requirements

Must be enrolled in Traditional Chinese Medicine course

....

This unit provides further learning experiences that enable the students to explore the original theories on physiology, pathology, diagnosis, differentiation and treatment of diseases through select periods of Chinese history. Many theoretical concepts, diagnostic systems and therapeutic methods of Traditional Chinese Medicine (TCM) are still in current usage, and will be covered through the study of important classical texts and academic schools of TCM thought. This unit expands upon the student's understanding of TCM theories and practice principles through studies of the classical literature.

100852.2   Classics of Modern Philosophy

Credit Points 10 **Level** 2

Equivalent Units

63049 - Critical and Modern Philosophy

Special Requirements

Successful completion of 60 credit points at Level 1.

....

Classics of Modern Philosophy introduces students to a selected number of 'great' (highly influential) philosophical texts of the late nineteenth and twentieth centuries. Addressing fundamental issues such as human freedom, the nature of truth and knowledge, technological progress, problems of modern life, this unit guides students through key statements with supporting explanation of the philosophers, their projects and careers, and relevant social contexts.

101870.1   Climate Change and Culture

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit introduces climate change as a complex social, cultural and political phenomenon, one that is re-shaping the way we live in the world and future lifestyles. Because climate change is highly contested, the course critically examines the issue from different theoretical, disciplinary, social and cultural perspectives. Topics range from cultural theory and forms of social action to the history and construction of climate change as concepts and debates around nature, culture, science, economics and consumption; to social justice, Indigenous knowledge systems, popular culture, the media and Australian politics, global governance, cities and urban planning.

300837.1   Climate Change Science

Credit Points 10 **Level** 2

Prerequisite

300808.1 Introductory Chemistry OR **300800.1** Essential Chemistry 1 AND **300802.1** Biodiversity

Equivalent Units

300781 - Atmospheric Science

....

A factual understanding of the energy balance of the globe, how this impacts on climate and how climate has varied in the past, is essential for any person working in the climate change area. This unit will introduce students to the concept of energy balance and climate, our understanding of how climate works, and how it has changed through time. Topics in basic atmospheric science will give students a critical understanding of current environmental concerns and debates about radiative forcing (the greenhouse effect), climate change, ozone depletion, photochemical pollution and acid precipitation.

401120.1   Clinical and Professional Practice (Honours)

Credit Points 20 **Level** 4

....

400879.1   Clinical Assessment Methods

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of human anatomy & physiology and pathophysiology of common impairments of health.

Prerequisite

400138.1 Pathophysiology 1 AND **400868.1** Human Anatomy and Physiology 1 AND **400869.1** Human Anatomy and Physiology 2

Equivalent Units

400262 - Clinical Diagnosis

....

This unit is designed to introduce students to basic principles and essential skills of physical examination and diagnostic/laboratory investigation procedures, required for successful approach to diagnosis of health impairment states. Primary contact health practitioners are expected to have sound understanding of disease presentation,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 300

techniques of patient interviewing and examination for collection of relevant clinical information as well as the ability to select appropriate laboratory tests and interpret their findings. This unit will also help students to develop fundamental clinical reasoning skills required in the medical decision making process.

300951.2   Clinical Classification and Coding

Credit Points 10 **Level** 2

Prerequisite

300950.2 Fundamentals of Medical Concepts and Terminology

....

This unit is designed to enable the student to classify diseases and interventions using the current version of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification, the Australian Classification of Health Interventions and the Australian Coding Standards (ICD-10-AM/ACHI/ACS). The unit will also include the historical development of clinical classification systems as well as the purpose and value of classifying diseases and interventions within the health system. The student will become familiar with the structure and content of ICD-10-AM ACHI/ACS and be introduced to the rules and conventions associated within ICD-10-AM/ACHI. The primary ACS for ICD-10-AM/ACHI will be studied and applied when coding from line diagnoses/interventions, case studies, simple discharge summaries and clinical record reports. They will gain skills in data abstraction for clinical coding, specifically, the selection of principal and additional diagnoses and interventions.

400985.2   Clinical Education A

Credit Points 10 **Level** 3

Prerequisite

400982.1 Core Competencies in Physiotherapy Practice AND **300754.1** Neuroanatomy AND **400981.1** Clinical Pharmacology AND **400864.2** Research Methods (Quantitative and Qualitative)

Corequisite

400983.1 Orthopaedic Physiotherapy AND **400986.1** Neurological Physiotherapy AND **400984.1** Cardiorespiratory Physiotherapy

Special Requirements

Students must have passed or be enrolled in the three co-requisite units. Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4668 Bachelor of Health Science (Honours) / Master of Physiotherapy or 4667 Master of Physiotherapy. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. lf students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases

Policy. Students are required to wear the UWS physiotherapy uniform which complies with NSW Health uniform requirements. Students cannot enrol in Year 3 Physiotherapy units until they have completed 160 credit points in the Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs.

....

This unit focuses on the core competencies of physiotherapy professional practice in acute care settings. These competencies will be developed through a supervised, community-based clinical education placement. Professional competencies addressed in this unit include communication, documentation, reflection, professional and ethical behaviour. In addition, students will develop skills in physiotherapy assessment and treatment in acute care settings which may span the musculoskeletal, neurological and cardiorespiratory domains.

401110.1   Clinical Education B (Rehabilitation)

Credit Points 10 **Level** 4

Prerequisite

400997.3 Exercise Rehabilitation AND **400998.2** Neurological Rehabilitation

Incompatible Units

401051 - Clinical Education B (Rehabilitation)

Special Requirements

Students must be enrolled in 4706 Bachelor of Physiotherapy or 4707 Bachelor of Physiotherapy (Honours)

....

This clinical education placement will operationalise the theoretical and research knowledge and skills learnt in 400997 Exercise Rehabilitation and 400998 Neurological Rehabilitation. Students will be required to assess and treat clients in rehabilitation settings. Treatments will be focused on improving client mobility and function that is altered by illness, injury, chronic disease or a disability. This will assist in preparation for client discharge home or to an appropriate residential facility, as well as enhance functioning at home or in the community. Assessment and treatments will tend to have a neurological physiotherapy focus, but clients may also present with cardiorespiratory and musculoskeletal conditions which require intervention. Students will, therefore, be expected to integrate knowledge and skills learnt across all physiotherapy-specific units in their provision of client-centred care as well as draw on their more general knowledge from earlier stages of the course.

401111.1   Clinical Education C (Ambulatory Care)

Credit Points 10 **Level** 4

Prerequisite

400983.1 Orthopaedic Physiotherapy AND **400997.3** Exercise Rehabilitation AND **400999.3** Musculoskeletal Physiotherapy

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 301

Incompatible Units

401052 - Clinical Education C (Ambulatory Care)

Special Requirements

Students must be enrolled in 4706 Bachelor of Physiotherapy or 4707 Bachelor of Physiotherapy (Honours)

....

This clinical education placement will operationalise the theoretical and research knowledge and skills learnt in 400983 Orthopaedic Physiotherapy, 400999 Musculoskeletal Physiotherapy and 400997 Exercise Rehabilitation. Students will be required to assess and treat clients who present in hospital outpatient departments, community settings and private practices. This involves the assessment of the client's impairments, function and disability within their home and community environment. Interventions may include manual and exercise therapy; use of electrophysical agents, taping and bracing; and education regarding both prevention and management of conditions. Assessment and treatment will tend to have a musculoskeletal physiotherapy focus, however, clients may also present with neurological and cardiorespiratory conditions that require intervention. Students will therefore integrate knowledge and skills learnt across all physiotherapy-specific units in their provision of client-centred care as well as draw on their more general knowledge from earlier stages of the course.

401112.1   Clinical Education D (Paediatrics)

Credit Points   10 **Level**   4

Prerequisite

400985.1 Clinical Education A OR **401110.1** Clinical Education B (Rehabilitation) OR **401111.1** Clinical Education C (Ambulatory Care)

Corequisite

401106.1 Paediatric Physiotherapy

Incompatible Units

401053 - Clinical Education D (Paediatrics)

Special Requirements

Students must be enrolled in 4706 Bachelor of Physiotherapy or 4707 Bachelor of Physiotherapy (Honours). Prior to enrolling in this unit students must have 1) submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 OR a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students are required to wear the UWS physiotherapy uniform which complies with NSW Health uniform requirements.

....

This clinical education placement will operationalise the knowledge (theory and research) and skills learnt in Paediatric Physiotherapy. Students will also apply the knowledge and skills learnt in musculoskeletal,

cardiorespiratory and neurological physiotherapy units to provide appropriate and holistic care to paediatric clients. Students will be required to assess and treat paediatric clients in acute hospital, rehabilitation or community settings. This involves the consideration of a child's age, development, and diagnosis during assessment and treatment. Advanced communication skills are required to educate parents and children on the prevention and management of the conditions. Students will therefore be expected to integrate knowledge and skills learnt all physiotherapy-specific units in their provision of client-centred care as well as draw on their more general knowledge from earlier stages of the course.

401113.1   Clinical Education E (Advanced Care)

Credit Points   10 **Level**   4

Prerequisite

400997.3 Exercise Rehabilitation OR **400985.1** Clinical Education A

Corequisite

401107.1 Physiotherapy for Chronic Illness and Disease AND **401110.1** Clinical Education B (Rehabilitation) OR **401111.1** Clinical Education C (Ambulatory Care)

Incompatible Units

401054 - Clinical Education E (Advanced Care)

Special Requirements

Students must be enrolled in 4706 Bachelor of Physiotherapy or 4707 Bachelor of Physiotherapy (Honours). Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 OR a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students are required to wear the UWS physiotherapy uniform which complies with NSW Health uniform requirements.

....

This clinical unit involves the integration of musculoskeletal, neurological and cardiorespiratory physiotherapy assessment and treatment skills in an advanced physiotherapy care environment. Advanced problem-solving skills will be required to manage complicated client presentations in various clinical environments. Advanced care environments may include speciality areas such as burns, spinal, emergency, intensive care and aged care units within a hospital, or private practice and community-based services where the physiotherapist is the primary care practitioner. Student preferences and prior clinical placement experience will be considered in the clinical placement allocation process. This will help to ensure all students are given the opportunity to explore the breadth of practice of physiotherapy in different environments.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 302

401097.1   Clinical Leadership and Patient Safety

Credit Points 10 **Level** 3

Prerequisite

401069.1 Paramedic Practice 4

Special Requirements

Prior to enrolling in this unit, students must: 1) Have signed the Student Undertaking Form 2) Have received their National Police Certificate and presented this to Student Central Office to have it recorded on their student record 2) Have completed a Working with Children Check 3) Have completed a senior first aid certificate (must have any of the following unit codes: HLTFA301B, HLTFA1A, HLTFA401B, HLTFA203A or HLTFA311A) 4) Comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. 5) Buy the Western Sydney University paramedic uniform, which complies with the NSW Health uniform requirements. Students are expected to have a complete Western Sydney University student paramedic uniform including: Helmet, boots, belt, Hi-visibility wet-weather gear (jacket and pants), cargo pants, long-sleeved shirt, jumper, Hi-visibility vest, cap, safety glasses. Students are expected to have their own stethoscope. All uniform and equipment must be taken to every shift. Students who attend a shift without the necessary equipment will be refused attendance by the Ambulance Service of New South Wales.

....

This unit introduces students to clinical leadership, supervision and patient safety in the context of paramedicine. Students will undertake a 4 week clinical placement block with an emergency ambulance crew, which will in part be used as a basis for reflective learning activities and critical analysis. Students will explore and discuss concepts of clinical leadership and supervision, drawing from their clinical placement experiences. Students will learn about leadership styles, principles of clinical education, mentoring and supervision in the field, clinical governance and patient safety, and management of paramedic welfare and resilience.

400981.2   Clinical Pharmacology

Credit Points 10 **Level** 2

Prerequisite

400138.3 Pathophysiology 1

Equivalent Units

400135 - Clinical Pharmacology and Microbiology

Incompatible Units

300505 - Pharmacology

....

This unit explores in depth clinical pharmacology fundamental to the practice of allied health (physiotherapy and podiatric medicine) and complementary medicine (traditional Chinese Medicine). General principles of pharmacology, pharmacokinetics and pharmacodynamics will be discussed. Key drug categories affecting the main body systems will be introduced in terms of their mechanisms of action, adverse reactions and clinical

applications. In the context of antimicrobial pharmacology, general concepts of microbiology will be introduced offering students an understanding of the causative microorganisms, the complex relationship between host and pathogen, the pharmacological actions of antimicrobial drugs and the principles of infection control.

401169.1   Coaching Sport and Recreation Activities

Credit Points 10 **Level** 3

Assumed Knowledge

Completion of two (2) introductory coaching certificates.

Equivalent Units

400893 - Ethical Issues in Sport and Athletics, 400799 - Recreational Sports, 100673 - Human Movement 6

Special Requirements

Students must be enrolled in 4659 Bachelor of Health Science (PDHPE). Students must have completed a Child Protection Course, Prohibited Employment Declaration, and First Aid Certificate.

....

Coaching Sport and Recreation Activities offers students with a learning experience based on the principles of physical education and sports coaching in variety of sports and recreational activities. This unit builds upon physical activity instruction and teaching games for understanding (game sense) introduced in earlier units. You will have the opportunity to plan, implement, and reflect on your own teaching practice during tutorials and within community sport contexts. You will learn to see things from multiple perspectives based on content delivered by university staff, peers, and external sport organisations. The unit incorporates experience in meaningful situations that will help prepare you for work in a dynamic field of education.

401169.2   Coaching Sport and Recreation Activities

Credit Points 10 **Level** 3

Assumed Knowledge

Completion of two (2) introductory coaching certificates.

Prerequisite

400798.3 PDHPE: Games for Diverse Groups

Equivalent Units

400893 - Ethical Issues in Sport and Athletics, 400799 - Recreational Sports, 100673 - Human Movement 6

Special Requirements

Students must be enrolled in 4659 Bachelor of Health Science (PDHPE). Students must have completed a Child Protection Course, Working with Children Check and First Aid Certificate.

....

Coaching Sport and Recreation Activities offers students with a learning experience based on the principles of physical education and sports coaching in variety of sports and recreational activities. This unit builds upon physical activity instruction and teaching games for understanding (game sense) introduced in earlier units. You will have the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 303

opportunity to plan, implement, and reflect on your own teaching practice during tutorials and within community sport contexts. You will learn to see things from multiple perspectives based on content delivered by university staff, peers, and external sport organisations. The unit incorporates experience in meaningful situations that will help prepare you for work in a dynamic field of education.

101677.3   Cognitive Processes

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of core concepts of cognition, perception and biological psychology

Prerequisite

101183.2 Psychology: Behavioural Science

Equivalent Units

100016 - Human Learning and Cognition

Special Requirements

Prerequisites will not apply to students enrolled in 1630 Graduate Diploma of Psychological Studies.

....

Cognitive psychology studies the mental processes that underpin attention, perception, learning and memory. Conceptual and research questions include: How do we recognize speech, faces, or music? What are the structures and mechanisms of human memory? What processes underpin acquisition of language, and are the processes similar when we learn a second language? What processes are involved in reading? What factors affect attention and performance? Is creativity anything more than problem solving? Contemporary theories will be discussed and evaluated. Investigative research methods include experiments, computer modelling, clinical case studies, and brain imaging.

800173.1   Cognitive Science: Research and Application

Credit Points 10 **Level** 7

Assumed Knowledge

Master of Research core units: Research Design 1, Research Literacies or equivalent

....

Cognitive science is the interdisciplinary scientific investigation of the mind. Contemporary research in cognitive science conducted by members of the MARCS Institute forms the core of the unit. Research areas to be addressed: plasticity and learning; action and coordination; nonverbal communication; and ageing and cognition. Examples of research questions: Can learning be unconscious? What mechanisms enable interpersonal coordination as seen in music and dance ensembles? Why is it that music elicits strong emotions? How does attention influence perception? How does conditioning explain human preferences? Does social facilitation apply to humans interacting with robots? In what way does ageing impact upon decision making? Applications to the arts, education, health, aging, design, human-machine interaction and artificial intelligence will be discussed.

401040.1   Collaborative Care

Credit Points 10 **Level** 3

Prerequisite

401036.1 Complex Care 1 AND **401038.1** Midwifery Practice Experience 3

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

The Australian College of Midwives and the National Health and Medical Research Council (NHMRC) provide guidelines to assist midwives to recognise when to refer or consult with other midwives or health care practitioners, as well as collaborative care arrangements. This unit provides students with the knowledge to collaborate with all health professionals. This includes assessing procedures for managing obstetric emergencies; transferring women or newborns; assessing referral pathways; and caring for bereaved families.

100900.4   Comedy and Tragedy

Credit Points 10 **Level** 2

Equivalent Units

B2857 - Comedy and Tragedy

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit will examine the theory, writing and performance of Western Tragedy and comedy. The generic terms "tragedy" and "comedy" will provide signposts for both historical and theoretically modern approaches to a range of plays. Texts selected from the period since 1950 may represent comedy and/or tragedy in popular culture, and may have been written for media other than the stage, such as television and film.

400732.2   Communication in Health

Credit Points 10 **Level** 1

Equivalent Units

400131 - Communication for the Helping Professions, 700062 - Communication in Health (UWSC)

....

NOTE: The ONLINE offering is currently only available to students in the Public Health Key program. Communication is integral to professional relationships, whether working individually with a client, educating community members on health matters, or working with other professionals as part of a multidisciplinary team. This unit aims to develop communication skills in preparation for work within the health professions across these areas. Communication skills will include those needed to form therapeutic relationships with individual clients and groups, as well as those required to communicate health information to clients, groups and the wider community. Students will develop skills to establish appropriate working relationships with professional colleagues.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 304

700062.3 Communication in Health (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

400732 - Communication in Health, 400131 - Communication for the Helping Professions

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

Communication is integral to professional relationships, whether working individually with a client, educating community members on health matters, or working with other professionals as part of a multidisciplinary team. This unit aims to develop communication skills in preparation for work within the health professions across these areas. Communication skills will include those needed to form therapeutic relationships with individual clients and groups, as well as those required to communicate health information to clients, groups and the wider community. Students will develop skills to establish appropriate working relationships with professional colleagues.

300007.2 Communication Systems

Credit Points 10 **Level** 3

Prerequisite

300057.3 Signals and Systems

....

This unit will provide a basic introduction to communication systems and techniques. Specific topics covered include energy and power spectral density, amplitude modulation, frequency modulation, pulse modulation, an overview of digital modulation techniques, noise in communication systems and an overview of current telecommunication systems; spread spectrum systems, optical communication systems, radio broadcasting and mobile communication systems.

101595.2 Community and Social Action

Credit Points 10 **Level** 2

Equivalent Units

101300 Education for Social Action

Special Requirements

Successful completion of 40 credit points

....

This unit will provide an understanding of social change processes and the strengths and challenges involved in social change for the 21st century. Students will be able to identify links between change at local/global and individual/structural levels. They will focus on an area of particular interest to themselves and on the skills involved in bringing about change. At the end of this unit students will have acquired the knowledge required to be active change agents.

102003.1 Comparative Nationalism

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The phenomenon of nationalism, considered not so long ago to have passed its peak, now dominates world politics and permeates political discourse. It is crucial to the understanding of the construction of the EU and its challenges, it underpins the tensions and conflicts which find expression in debates around 'the veil', and constitutes much of the agenda of the 'war on terror'. This unit will examine theories of nationalism and problems of definition, the ancient or modern origins of nationalism, key chronological and geographic varieties and the models proposed to describe them - cultural, social and political representations of nationalism, and finally, the articulation of nationalist discourses. The readings draw on a variety of approaches - historical, sociological, anthropological, literary, and psychological - and aim at providing a solid introduction to the scholarly literature.

300838.1 Comparative Physiology

Credit Points 10 **Level** 2

Assumed Knowledge

Basic biology, chemistry and maths

Prerequisite

300818.1 Introduction to Physiology OR **300936.1** Functional Proteins and Genes OR **300801.1** Animal Science OR **300816.1** Cell Biology OR **300802.1** Biodiversity

Equivalent Units

300608 - Animal Physiology

Special Requirements

Successful completion 60 credit points at Level 1 and 20 credit points at Level 2.

....

Building on the underlying physical and chemical principals/laws that define physiology, this unit from both a systems (e.g. Respiratory) and environmental (e.g. Marine) perspective, seeks to compare the functional physiology of organisms at all levels of organisation. Particular attention will be paid to respiration, temperature tolerance & regulation, living in water, sensory and neurophysiology. Students will have the opportunity to carry out a defined research project.

401036.1 Complex Care 1

Credit Points 10 **Level** 2

Prerequisite

401034.1 Midwifery Knowledge 3

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 305

Units

This unit introduces students to complexities in health that emerge during pregnancy, labour, birth and the postnatal period which require additional care when the health of the mother and/or newborn may be compromised. This module also focuses on the midwifery care required for newborns with health changes from birth to six weeks and for those neonates with special needs.

401039.1   Complex Care 2

Credit Points 10 **Level** 3

Prerequisite

401036.1 Complex Care 1 AND **401038.1** Midwifery Practice Experience 3

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit continues to explore the complex issues surrounding childbirth with a particular emphasis on those women who have pre-existing conditions. Dilemmas and challenges that surround infertility, maternal mental health, medical conditions and previous surgical conditions that may impact on pregnancy and or birth, are examined. The unit also explores environmental issues and women's social and psychological health. In addition, the unit includes management and the care of the sick newborn.

401108.1   Complex Cases and Professional Issues

Credit Points 10 **Level** 4

Prerequisite

400894.2 Contemporary Youth Health Issues AND **400999.3** Musculoskeletal Physiotherapy AND **401107.1** Physiotherapy for Chronic Illness and Disease AND **400985.1** Clinical Education A AND **400985.2** Clinical Education A

Corequisite

401110.1 Clinical Education B (Rehabilitation) AND **401111.1** Clinical Education C (Ambulatory Care) AND **401112.1** Clinical Education D (Paediatrics) AND **401113.1** Clinical Education E (Advanced Care)

Incompatible Units

401049 - Complex Cases and Professional Issues

Special Requirements

Students must be enrolled in course 4706 Bachelor of Physiotherapy or 4707 Bachelor of Physiotherapy (Honours)

....

In this unit, students will further develop their clinical reasoning with respect to clients with complex presentations. A framework will be presented, which synthesises complex information such as the theory, research and skills in musculoskeletal, cardiorespiratory and neurological physiotherapy across the lifespan, and theories related to professionalism, ethics, safety and communication. This framework will be applied to the area of Intensive Care, where students will develop further knowledge and skills in specific cardiorespiratory techniques such as manual hyperinflation and suctioning.

This unit also contains the discussion of a range of recent professional developments in physiotherapy, which are relevant to entry level practitioners. These include registration as a physiotherapist, continuing education, workload control strategies, duty of care responsibilities and quality improvement processes (including critical reflection), employment strategies and career pathways.

300911.1   Complex Forensic Studies

Credit Points 10 **Level** 3

Prerequisite

300864.1 Imaging Science & Photographic Evidence AND **300873.1** Crime Scene Investigation AND **300843.1** Forensic and Environmental Analysis AND **300806.1** Forensic Science

Equivalent Units

300373 - Complex Forensic Case Studies

Special Requirements

Students must be enrolled in 3589 Bachelor of Science (Forensic Science) or 3562 Bachelor of Science (Advanced Science).

....

This is an advanced and integrating capstone unit for students studying forensic science. It incorporates previous science, forensic science and social science units to form a comprehensive examination of the functionality of forensic evidence within the contemporary Australian judicial system. This capstone highlights the needs for an interdisciplinary approach to define and critique forensic science evidence from various perspectives including science, law, criminology, policing and social science. Students are required to use their skills and knowledge with additional independent research and inquiry using a range of set literature. The unit will study a range of contemporary issues including how the judicial system evaluates the reliability of evidence from an admissibility threshold, identification evidence from CCTV, contextual bias with forensic examination, contamination issues with forensic evidence and methods of expressing forensic findings and/or significance.

300987.1   Composite Structures

Credit Points 10 **Level** 4

Prerequisite

300730.2 Steel Structures AND **300739.2** Timber Structures (UG)

....

This unit builds on knowledge gained in steel and concrete structures, especially the design of structural members using either steel or concrete. Students will learn the design of composite beams, floors, columns and connections based on Australian and International standards as well as mechanics of materials.

300999.1   Computational Fluid Dynamics

Credit Points 10 **Level** 4

Assumed Knowledge

Numerical methods, thermal dynamics and fluid mechanics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 306

Prerequisite

300027.2 Engineering Computing AND **300759.1** Thermal and Fluid Engineering

....

This unit introduces students to the fundamentals of computational fluid dynamics. The unit covers the conventional methods for solving the ordinary and partial differential equations. The numerical method for solving the inviscid flow and the viscous flow problems will be introduced. The students learn the application of the commercial software in the engineering problems.

301000.1   Computer Aided Engineering

Credit Points 10 **Level** 4

Prerequisite

300488.4 Numerical Methods in Engineering AND **300760.1** Thermodynamics and Heat Transfer AND **300761.1** Advanced Mechanics of Materials

Special Requirements

Essential Equipment - Finite element analysis packages - ANSYS and SolidWorks

....

This unit describes the basics and fundamentals of computer aided engineering focusing on the advanced topics of finite element methods, which is a powerful numerical tool for analysing a wide range of engineering problems. The objective of this unit is to advance students' understanding on the finite element method (FEM)-based computer aided engineering (CAE) and its applications in the fields of solid mechanics, fluid mechanics, thermodynamics and heat transfer and product design and development as well. Academic skills on research and communication of students are also achieved through conducting FEM-based CAE projects.

301031.1   Computer Algebra

Credit Points 10 **Level** 2

Assumed Knowledge

Students should be comfortable with high school level of Mathematics and have passed Mathematics 1A. This is required to carry out more advanced projects in the unit.

Corequisite

300672.2 Mathematics 1A

....

This unit will introduce the popular computational software Mathematica, through which students will explore and investigate real-world mathematical problems. The unit promotes an experimental side of mathematics and will employ symbolic computation to gain insight and intuition into problems, to discover mathematical patterns and relationships, and create impressive graphics to expose mathematical structures.

300093.4   Computer Graphics

Credit Points 10 **Level** 3

Prerequisite

300027.2 Engineering Computing OR **300581.4** Programming Techniques OR **300147.4** Object Oriented Programming

Equivalent Units

14956 - Computer Graphics

....

Computer Graphics will examine elementary graphics concepts, algorithms and programming skills for producing graphical applications, in both two-dimension (2D) and three-dimension (3D) using Open GL. Techniques and algorithms will be programmed in Processing, which is a very easy-to-learn programming language yet powerful and comprehensive.

300565.2   Computer Networking

Credit Points 10 **Level** 2

Assumed Knowledge

Fundamentals of computer architecture, binary and hexadecimal numbering systems, and programming principles. They should also have a working knowledge of the World Wide Web.

Equivalent Units

300094 - Computer Networking Fundamentals, 300086 - Applied Data Communications and Networking, 700012 - Computer Networking (UWSC)

....

Computer Networking is an introductory unit in computer systems networking. It covers basic networking technologies, Ethernet fundamentals, ISO OSI model, routing, switching and subnetting, the Internet architecture, networking protocols including TCP/IP, important OSI layer 2 and 3 networking device fundamentals, basic network management and security issues. This unit is also the first of three units, which will prepare students for industry based networking certification (CCNA).

300946.1   Computer Networking (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

Fundamentals of computer architecture, binary and hexadecimal numbering systems, and programming principles. A working knowledge of the World Wide Web.

Incompatible Units

300094 - Computer Networking Fundamentals, 300086 - Applied Data Communications and Networking, 300565 - Computer Networking

Special Requirements

Students must be enrolled in 3684 Bachelor of Information and Communications Technology (Advanced), 3685 Bachelor of Computing (Information Systems) Advanced or 3688 Bachelor of Information Systems Advanced.

....

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 307

This unit introduces students to computer systems networking. It covers basic networking technologies, Ethernet fundamentals, ISO OSI model, routing, switching and subnetting, the Internet architecture, networking protocols including TCP/IP, important OSI layer 2 and 3 networking device fundamentals, basic network management and security issues. This unit is also the first of three units, which will prepare students for industry based networking certification (CCNA). Students in this advanced unit will be required to undertake individual assessment activities demonstrating a high level of technical and applied theoretical competency.

700012.2   Computer Networking (WSTC)

Credit Points 10 **Level** 2

Assumed Knowledge

Fundamentals of computer architecture, binary and hexadecimal numbering systems, and programming principles. Students should also have a working knowledge of the World Wide Web.

Equivalent Units

300094 - Computer Networking Fundamentals, 300086 - Applied Data Communications and Networking, 300565 - Computer Networking

Special Requirements

Students must be enrolled at Western Sydney University, The College unless specific approval is given by Western Sydney University. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7067 Diploma in Information and Communications Technology Extended or 7083 Bachelor of Information and Communications Technology Extended (WSTC First Year Program) must pass 700199 Academic Communication 2 (WSTC Prep) or 700208 English for Tertiary Study 2 (WSTC Prep) or 700210 Introduction to Academic Communication 2 (WSTC Prep), and must pass 700201 Computer Studies (WSTC Prep) before enrolling in this unit.

....

This is an introductory unit in computer systems networking. It covers basic networking technologies, Ethernet fundamentals, ISO OSI model, routing, switching and sub-netting, the internet architecture, networking protocols, including TCP/IP, important OSI layer 2 and 3 networking device fundamentals, basic network management and security issues. This unit is also the first of three units which will prepare students for industry based networking certification (CCNA).

300095.4   Computer Networks and Internets

Credit Points 10 **Level** 3

Assumed Knowledge

Fundamentals of data communications and computer networking, such as that covered in the prerequisite unit.

Prerequisite

300565.2 Computer Networking OR **300094.2** Computer Networking Fundamentals OR **300086.2** Applied Data

Communications and Networking OR **300946.1** Computer Networking (Advanced)

....

This unit extends on the work undertaken in the prerequisite unit and provides students with an in-depth explanation on the role of the architecture, components, and operations of routers and switches in a small network. Students will configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPng, single- area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This is the second of three units that prepares the student for industry based networking certification (CCNA).

300096.5   Computer Organisation

Credit Points 10 **Level** 2

Prerequisite

300027.2 Engineering Computing OR **300580.2** Programming Fundamentals

Corequisite

200025.2 Discrete Mathematics OR **200237.3** Mathematics for Engineers 1

....

This unit is designed for computer science students, particularly those interested in systems programming and hardware development. The students will learn about the interface between the hardware and software of a computer system. This will involve study of some aspects of computer architecture and low level interfacing to gain an insight into CPU organisation at the assembly language level. After completing this unit students will be able to write procedures in an assembly language, and use their understanding of the relationship between the instruction set architecture and the implementation of high level languages to write efficient programs.

300569.2   Computer Security

Credit Points 10 **Level** 3

Assumed Knowledge

Students are expected to have general understanding on computer systems; computer fundamentals, databases, and web technologies.

....

This unit aims in particular at, but is not limited to, the implementation and management of security and privacy policies of organisations within the standards and legal framework that is also applicable to the Australian standards.

700201.2   Computer Studies (WSTC Prep)

Credit Points 10 **Level** Z

Equivalent Units

900028 - Computer Studies (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 308

....

Computer Studies introduces to students the new age of information, where computers and communication play an integral part in our lives. The unit has been developed to enhance a student's practical ability as well as build a solid theoretical foundation for further study.

300736.2 Concrete Structures (UG)

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of engineering mechanics and statics.

Prerequisite

300733.2 Introduction to Structural Engineering

Corequisite

300732.2 Structural Analysis

Equivalent Units

85251 - Concrete Structures (UG)

....

This unit covers the basic elements of structural behaviour and design with reinforced and pre-stressed concrete. Students will learn to analyse the section capacity of reinforced concrete beams, slabs, and columns, and design simple suspended structures. The unit places a strong emphasis on the process of structural design.

300855.1 Conservation Biology

Credit Points 10 **Level** 3

Prerequisite

300802.1 Biodiversity AND **300836.1** Botany OR **300838.1** Comparative Physiology OR **300865.1** Plant Physiology OR **300845.1** Genetics OR **300839.1** Ecology

Equivalent Units

300466 - Environmental Biology, 300617 - Conservation Biology

Special Requirements

Successful completion of 40 credit points at Level 2 and 20 credit points at Level 3. Students are required to wear a lab coat and enclosed footwear.

....

Most species disappearances have occurred in major extinction events spread over geological time. Are we in the midst of and the cause of another mass extinction event? This unit will explore this idea by examining the processes that have led to, and are leading to species extinction and the current biodiversity crisis. Many of the methods and issues used in and associated with conservation will be covered in a variety of case studies, field and laboratory activities.

200009.3 Constitutional Law

Credit Points 10 **Level** 2

Corequisite

200006.2 Introduction to Law

Equivalent Units

69010 - Constitutional Law, F1006 - Constitutional Law, LW202A - Constitutional Law

....

This unit introduces the legal rules and doctrines governing State and Commonwealth Constitutional systems in Australia. Topics covered include: State and Commonwealth Constitutions; legislative powers of the Commonwealth and State governments; Executive; the separation of powers doctrine; the legal relations between State and Commonwealth laws; Constitutional freedoms and restrictions on Commonwealth legislative powers.

200504.2 Construction Economics

Credit Points 10 **Level** 4

Assumed Knowledge

Building construction including residential, light industrial and small commercial as well as building measurement and estimating.

....

This subject is designed to provide students with: an understanding of economic principles, national and international economic issues; general investment issues; how the national and international economy functions; how the building industry and the building firm relates to the national and international economy; and how economic reasoning may be applied to various problems in the building industry.

300886.1 Construction in Practice 1

Credit Points 10 **Level** 3

Assumed Knowledge

Local Government planning requirements, residential construction details, quantity surveying, contract documentation, site planning

Prerequisite

300706.2 Building 1 AND **300729.1** Graphic Communication and Design AND **300707.2** Building 2

Equivalent Units

200482 - Construction in Practice 1

....

This unit is designed to allow the student to gain experience with the complexity of the construction industry by integrating knowledge from earlier units. The unit involves group work on construction planning and management, regulatory control and client liaison required for initiating and completing a residential construction project.

200503.2 Construction Information Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Students must be familiar with spreadsheet and database software. Students should also have a basic understanding of contract administration.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 309

Units

This unit is designed to provide skills and knowledge for information management technology and practice as it relates to the building industry. The unit gives and overview of information management, data collection and storage, information classification systems, communications, specialist computer applications and artificial intelligence.

300728.2 Construction Planning

Credit Points 10 **Level** 3

Assumed Knowledge

Understand estimating preliminaries for multi storey construction.

Prerequisite

200468.2 Estimating 1

Equivalent Units

PL302A - Construction Planning

....

This unit is intended to provide students with the ability to organise the resources required for a major construction project; to plan the sequence and timing of construction operations; and to assess the risk inherent in achieving a construction schedule.

300720.2 Construction Technology 1 (Civil)

Credit Points 10 **Level** 2

Prerequisite

300706.2 Building 1 OR **300707.2** Building 2

Equivalent Units

BG204A - Construction Technology 1 (Civil)

....

This unit develops students' knowledge and skills in appraising site requirements for construction purposes, both at the pre tendering and construction phase of a project. Content: Soil classification, site investigation, site safety, plant and equipment, trenches, detention/retention pits and basins, temporary structures, demolition, site dewatering, building surveying, and site environmental control.

300721.4 Construction Technology 2 (Substructure)

Credit Points 10 **Level** 2

Assumed Knowledge

Basic knowledge of building technology from TAFE, university or practical experience.

Equivalent Units

BG207A - Construction Technology 2 (Substructure)

....

This unit will further develop your knowledge of substructures. We will investigate how applied loads and the foundation reaction determine the construction of different retaining walls and footings. We will specifically examine how surface and ground water affect a sub-structure. You will be expected to solve difficult foundation

problems using innovative techniques, including underpinning, grouting and temporary substructures. The types of sub-structures include strip footings, waffle-pod slabs, end-bearing & friction piles, gravity & cantilever retaining walls and tied-earth structures.

200502.3 Construction Technology 3 (Concrete Construction)

Credit Points 10 **Level** 3

Assumed Knowledge

It is expected that students will have first studied the Building 1 and 2 units as well as Construction Technology 2.

Prerequisite

BG207A.1 Construction Technology 2 (Substructure) OR **300721.3** Construction Technology 2 (Substructure)

....

The aim of this unit is to introduce students to the concept of structures, loads and the effect of loads on structures in relation to concrete construction. Students will have an in-depth understanding of concrete as a construction material. It covers the construction technology aspects of concrete structural components and systems, including beams, columns, slabs and frames. Emphasis will be given to formwork design and construction. Students will be introduced to the relevant Australian Standards for concrete construction. The unit also aims at developing students' ability to deal professionally with other building professionals, including architects and structural engineers.

200470.4 Construction Technology 4 (Steel Construction)

Credit Points 10 **Level** 3

Assumed Knowledge

300706 - Building 1, 300707 - Building 2, 300720 - Construction Technology 1, 200502 - Construction Technology 2

....

This unit deals with the construction of structural steelwork. Students will gain better understanding of mechanical properties of steel. It covers various components in structural steelwork, and their behaviour under loads. Students will also be introduced to various frame systems in multi-story and high-rise construction and relevant Australian Standards for steel construction. Emphasis will be given to safe erection and assembly of structural steelwork. Due consideration will be given to the requirements of Workcover in relation to site safety and material handling. An introduction will also be given for Steel-concrete composite construction.

200471.3 Construction Technology 5 (Envelope)

Credit Points 10 **Level** 4

....

After undertaking this unit, you should understand the way internal spaces are designed and constructed to optimise thermal, visual and nacoustic comfort and for energy efficiency.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 310

301061.1 Construction Work Safety

Credit Points 10 **Level** 1

....

This introductory unit describes the context of safety management in the Australian construction industry. The topics covered include: The poor long-term record in the construction industry on Workplace Health and Safety (WHS); Strategies for improving the industry performance; Introduction to hazard identification and risk management; and Individual safety awareness and personal responsibility.

200084.2 Consumer Behaviour

Credit Points 10 **Level** 1

Equivalent Units

61721 - Consumer Behaviour, MK105A - Buyer Behaviour

....

A focus on the consumer is critical in marketing philosophy. Effective marketing strategies are necessarily formulated as a result of the understanding of basic consumer behaviour. This unit covers assumptions and concepts related to understanding the consumer, including but not limited to cultural and ethnic values, social class and status, personal influence, family and household influences, situational influences, consumer resources, involvement, motivation and knowledge, attitudes, individual differences in behaviour, personality, values and lifestyle, information processing, learning, influencing attitudes, diagnosis of decision process and behaviour, consumer decision-making process and need recognition, information search, alternative evaluation, purchase and its outcomes, retailing and consumer trends, market segmentation, diffusion of innovations, global consumer markets, consumerism and social responsibility.

300928.1 Consumer Issues in Nutrition

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of human nutrition and health. Computer literacy.

Equivalent Units

300360 - Consumer Issues in Nutrition

....

This unit explores current food and nutrition issues. It introduces students to the factors that influence public health nutrition and explores (a) the contribution food systems and food security makes to consumer wellbeing; (b) the changing global marketplace and the impact of globalisation on food security and ecological sustainability; and (c) the complex inter-connections between government policy, globalisation, consumerism and human health. Students will assess nutritional status from available data and explore the role of community food systems. Students will also be introduced to social research methods and plan a social research study to address a nutrition related issue.

200922.1 Consumers, Firms and Markets

Credit Points 10 **Level** 1

....

This unit is an introduction to microeconomics. It provides students with an understanding of basic concepts such as value, rational consumer behaviour, the behaviour of firms in various market structures, the efficiency and failings of markets, the distribution of wealth and income, and the role of government regulation and intervention. It illuminates these concepts by considering and debating their application to contemporary economic and social issues such as: the influence of marketing on consumer choices, the concentration of market power in Australian industries, rising income and wealth inequality, minimum wage laws, and governmental responses to environmental problems and climate change.

102048.1 Contemporary Childhoods

Credit Points 10 **Level** 2

Equivalent Units

101649 - Contemporary Perspectives of Childhoods

....

In contemporary Australia care and education provided for young children is both diverse and complex, as a result of a range of historical, philosophical, sociological and political factors. In recent years traditional understandings of how society views 'childhood' and the 'universal child' have been challenged by new discourses associated with the reconceptualisation of childhood. From an almost exclusive focus on children as the objects of socialization, the new sociology of childhood is now interpreting children and the experience of childhood as dynamic, social, multiple and relational. Broadening this sociological gaze has led to new approaches in theorising and conceptualising the study of childhood and the social world of the child. This unit will explore a range of approaches and research about the lives of children in historical and contemporary societies and in local and global settings. Students will investigate the multiplicity and social meaning of childhood; the regulating of children and their bodies, including the role of schools and other social institutions; and the cultural and social world of the child, in particular their agency, rights and exclusion. Beyond this, students in this unit will have a chance to explore the ethics and methodological issues of how research on and with children frames the way professionals work with children.

401196.1 Contemporary Issues in Child and Adolescent Health

Credit Points 10 **Level** 3

Special Requirements

Students must have passed 80 credit points of an undergraduate degree to enrol in this unit.

....

This unit begins with a brief examination of socio-cultural theories of childhood and adolescence as a background for the critical analysis of current debates about the health and wellbeing of children and adolescents. Case studies will be

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 311

used to explore contestable topics in child and youth health from an interdisciplinary perspective. The unit will address issues of child protection and parental responsibility in the mainstream community, Aboriginal and Torres Strait Islanders, and refugee health care settings. Knowledge gained in this unit will assist beginning practitioners in a variety of disciplines to take informed positions on topics relevant to child and adolescent health.

401194.1   Contemporary Issues in Public Health

Credit Points 10 **Level** 3

Assumed Knowledge

Fundamentals of public health, social determinates of health and the Australian health care system.

Prerequisite

400285.2 Public Health

....

This unit focuses on contemporary issues in public health. These priority concerns include chronic and age-related disease, communicable disease, mental health, sexual and reproductive health, child and maternal health, indigenous health and migrant health. You will bring together your knowledge in public health, epidemiology, sociology and economics to identify and evaluate social and environmental factors that affect these health issues. By evaluating effectiveness of current public policy you will make recommendations for policy and program development to improve outcomes for contemporary health issues. These topics will be explored in national and international contexts.

400335.3   Contemporary Issues in Sport Management

Credit Points   10 **Level** 3

Assumed Knowledge

Students should have an understanding of the objectives in Sport Marketing 1

Equivalent Units

B3087 - Contemporary Issues in Sport Management

....

Sport management operates in an environment where political, economic and legal influences impact on the running of sporting organisations. This unit critically examines contemporary issues influencing the management of sport in Australia.

200108.2   Contemporary Management Accounting

Credit Points   10 **Level** 2

Prerequisite

200116.4 Management Accounting Fundamentals

Equivalent Units

61122 - Advanced Management Accounting, AC303A - Advanced Management Accounting (V1), H2762 - Management Accounting

....

This unit views contemporary areas of management accounting from a strategic perspective, and critically examines some of the traditional concepts and techniques discussed in Management Accounting Fundamentals.

200568.3   Contemporary Management Issues

Credit Points 10 **Level** 3

Prerequisite

200571.2 Management Dynamics OR **MG102A.3** Management Foundations

Equivalent Units

H3740 - Contemporary Management Issues

....

This is an engaged unit that requires students to undertake real-world projects to support selected industry or community partners. The unit blends in-class and online activities as well as individual and group work, with self-directed problem-based learning. The focus of students' learning is on sustainable business, including the economic, social and environmental dimensions of business. The in-class workshops support students to conduct the required engagement activities with industry or community partners. As a third-year unit, attention is given to students' application of the knowledge and skills already acquired in their degree programs, and on the practice of business management skills.

400220.2   Contemporary Professional Practice in Mental Health Nursing

Credit Points 10 **Level** 7

Assumed Knowledge

Students are required to be registered nurses with basic knowledge of mental health, mental illness and assessment processes augmented with experience in mental health settings.

Special Requirements

Students must be enrolled in a postgraduate course.

....

Professional practice in Mental Health Nursing is continually evolving to meet changing social, political and legal requirements related to mental health issues. These requirements include changes in social and political understandings of mental illness and the rights and responsibilities of consumers, carers and providers. There has also been increased emphasis on health promotion, prevention and education in population specific contexts (eg, aged care, child and family, adolescent mental health, alcohol and other drugs services). Mental Health Nurses thus face challenges to develop practice that is congruent with the context of these changing requirements. This unit aims to provide a basis of inquiry into contemporary practice (s) from which the nurse can build an ongoing understanding and appreciation of changing influences.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 312

100960.2 Contemporary Society

Credit Points 10 **Level** 1

Equivalent Units

700132 - Contemporary Society (UWSC)

....

The unit introduces to students the socio-political organisation and cultural forms of the contemporary world focused on the production and structure of social relations, building on students' social and cultural experience. The unit will focus on the production and operation of social inequalities specifically gender, race/ethnicity and class and draw on key sociological and cultural studies approaches highlighting the role of culture and language in the production and maintenance of social inequalities with an emphasis on bilingualism and biculturalism in the consideration of race/ethnicity in contemporary Australia.

102201.1 Contemporary Theories of Religion and Society

Credit Points 10 **Level** 7

Assumed Knowledge

Undergraduate degree or equivalent.

....

Covering Australia and other parts of the world, this unit explores current social theories of religion at the micro, meso, macro, and cyber levels. Starting from the micro or individual level, it deals with theories on the emergence of post-dogmatic religion and the growth of subjectivised forms of religion in the non-institutional field. It then moves to the group or meso level and covers the activities of religious and non-religious groups in the public and post-secular sphere. It then reaches the global (macro) level to discuss notions of multiple modernities, transnationalism and civilizational analysis. Finally, at the cyber level the unit analyses recent theories on the impact of new social media on religion.

400894.2 Contemporary Youth Health Issues

Credit Points 10 **Level** 3

Incompatible Units

400280 - Sexuality, 400791 - Introduction to Drug Use in Society

Special Requirements

Students must be enrolled in 4659 Bachelor of Health Science (PDHPE) or 4549 Bachelor of Health Science (PDHPE)

....

The unit explores contemporary health issues related to young people. Students will examine a range of topics from a multidisciplinary approach, which include the social, cultural, political and biological factors that influence and construct young people's lives and health. Students will explore pathogenic and salutogenic approaches to understanding and promoting young people's health. When considering and analysing the influences and contexts, students will be able to gather resources and develop diverse meaningful strategies that will assist young people to promote health practices.

301090.1 Contextual Inquiry

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge related to the successful completion of Year 1 and 2 is assumed.

Prerequisite

301083.1 Design Studio 5: Symbol and Meaning Making

Equivalent Units

300314 - Designed Inquiry

....

Design and user research methods are critical in establishing frameworks for efficient and effective process and resource utilisation in designing, conducting and presenting research findings leading to design briefs that are succinct yet open to new innovations. A range of research design methods are presented and students are guided to the strategic selection of methods appropriate to their own self-sourced project theme. Data collection instruments are designed, operationalised, data coded and analysed via both qualitative and quantitative techniques and discussed in a vibrant peer environment inspired by design thinking and other research methods unique to the design profession.

101751.2 Contextualising Indigenous Australia (Day Mode)

Credit Points 10 **Level** 1

Equivalent Units

300455 - Indigenous Australia: Back to the Future

....

This unit will provide a comprehensive overview of Indigenous Australian cultures, histories and identities. The scope of the unit spans pre-colonisation to the twenty-first century across Australia and all relevant fields of study. A cross-section of institutional, community and popular culture contexts will be explored. This body of knowledge will provide a context for various professions and discussions. Students will have the exciting opportunity to hear from a diverse range of Indigenous educators from academics to artists through to performers and community elders. A broad understanding of Indigenous Australia will position students to be advocates for change in contemporary Australia.

200011.2 Contracts

Credit Points 10 **Level** 2

Corequisite

200006.2 Introduction to Law

Equivalent Units

69018 - Law of Contract, F1003 - Contracts, LW301A - Contracts

....

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 313

Contracts covers the formation of contracts, the requirement of writing, privity of contract, contractual terms and their interpretation, breach of contract, discharge of contractual obligations and elements vitiating its formation such as misrepresentation, misleading and deceptive conduct, mistake, undue influence, unconscionability, duress and discharge. Statutory developments are also considered such as the Contracts Review Act 1980 (NSW) and the Australian Consumer Law, as are the historic and theoretical aspects of the development of the law of contract.

300009.3   Control Systems

Credit Points 10 **Level** 3

Assumed Knowledge

200238 - Mathematics for Engineers 2 • Ordinary Differential Equations • First order, Second order, and Higher order. • Laplace transforms • Multivariable Calculus • Functions of two or more variables • Double integrals • Triple integrals. Similar to that contained in 200238 - Mathematics for Engineers 2. Students should also have the appropriate background and competence in the safe use of computers, test equipment, components and data sheets.

Prerequisite

300057.3 Signals and Systems OR **300480.2** Dynamics of Mechanical Systems

....

This unit introduces the fundamental concepts of automatic control engineering. It covers traditional and contemporary design and analysis techniques; the concepts required to design continuous time and discrete time controllers. Matlab is utllized considerably.

101799.2   Convicts and Settlers - Australian History 1788 - 1840

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

In little more than half a century Australia was transformed from a convict prison to a parliamentary democracy. The people who made this transformation were the ex-convicts, free settlers and first generation of colonial born children. The survival of data about ordinary people between 1788-1840 makes it possible to investigate families, communities, employment, law and order and the daily experiences of urban and frontier life in these formative years. Using family history resources on the internet and sophisticated digital archives of historical records in Australia and overseas, this unit will challenge assumptions about "who do you think we were?"

400982.3   Core Competencies in Physiotherapy Practice

Credit Points 10 **Level** 2

Prerequisite

400906.2 Introduction to Physiotherapy Practice AND **400732.2** Communication in Health AND **400881.3** Functional Anatomy AND **400882.2** Introduction to Biomechanics AND **400138.3** Pathophysiology 1

Corequisite

400981.2 Clinical Pharmacology

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy or 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy. This is a specialty unit offered as a compulsory core unit of the physiotherapy program. It is profession specific, preparing students to practice as physiotherapist and not relevant as an elective for non-physiotherapy students. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) A senior first aide certificate which includes cardiopulmonary resuscitation. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff. Students are required to wear the physiotherapy student uniform to all tutorials and during the 2-week clinical placement.

....

This unit builds on the knowledge and skills developed in first 1.5 years of physiotherapy study. It focuses on the core competencies of physiotherapy professional practice, which will be developed through a variety experiential and community engagement learning activities. Professional competencies addressed in this unit include communication, documentation, reflection, professional and ethical behaviour. In addition, students will develop skills in client assessment, interpretation of findings and education. A professional practice placement is incorporated into this unit.

200109.4   Corporate Accounting Systems

Credit Points 10 **Level** 3

Prerequisite

200536.3 Intermediate Financial Accounting

....

This unit builds on the fundamental knowledge of accounting procedures gained in Intermediate Financial

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 314

Accounting. It involves the comprehensive study of aspects of corporate accounting and reporting which are regulated by legislation, accounting standards, Australian Securities and Investment Commission and Stock Exchange requirements. This unit is designed to provide students with grounding in the regulation and practice of corporate reporting in Australia. The major orientation is towards the theoretical and practical aspects of corporate reporting, whilst at the same time exploring the reasons for regulatory disclosures.

200488.3 Corporate Financial Management

Credit Points 10 **Level** 2

Assumed Knowledge

HSC Mathematics, introductory economics or microeconomics

Prerequisite

200101.3 Accounting Information for Managers OR **200103.1** Accounting Reports and Decisions

Equivalent Units

200050 - Financial Management, 200110 - Corporate Financial Decision Making

....

This unit introduces the fundamental concepts of finance theory and the tools of financial decision making in the context of the Australian institutional environment. These concepts relate primarily to the time value of money, risk and return, capital budgeting and capital structure. The unit's purpose is to develop an understanding of the basic practices of financial management from the perspective of a firm (both large and small). Students examine the investment, financing and dividend decisions of corporations.

200488.4 Corporate Financial Management

Credit Points 10 **Level** 2

Assumed Knowledge

HSC Mathematics, introductory economics or microeconomics

Equivalent Units

200050 - Financial Management, 200110 - Corporate Financial Decision Making

....

This unit introduces the fundamental concepts of finance theory and the tools of financial decision making in the context of the Australian institutional environment. These concepts relate primarily to the time value of money, risk and return, capital budgeting and capital structure. The unit's purpose is to develop an understanding of the basic practices of financial management from the perspective of a firm (both large and small). Students examine the investment, financing and dividend decisions of corporations.

200923.1 Corporations, Economic Power and Policy

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge gained around consumers and markets, the Australian economy, economic methods and analysis.

Equivalent Units

200530 - Microeconomic Theory and Applications

....

Australia's industrial, financial and retail sectors are dominated by powerful corporations which engage in a wide variety of competitive and cooperative behaviours. This unit examines how modern corporations position themselves in terms of investment in large-scale production, technological innovation, the manipulation of information, marketing, and cooperative strategies to gain market share and enhance their profitability. It also explores the effects of the interactions of corporate behaviour and public policy, including the governmental function of constructing and regulating explicit market rules of exchange.

200924.1 Cost Benefit Analysis

Credit Points 10 **Level** 2

Assumed Knowledge

Basic understanding of economics.

Prerequisite

200525.3 Principles of Economics OR **200911.1** Enterprise Innovation and Markets

....

Students will learn and apply Cost Benefit Analysis, the most commonly used economic tool in business, consultancy and government organisations. The unit is a core unit in the Economics major but is open to all students who have a basic understanding of economics and a desire to improve their analytical skills and employability. At the completion of the unit, students will be able to explain the economic foundations of cost-benefit analysis and they will have experience with analysing, critically evaluating and developing a cost-benefit analysis for a specific proposal. Students will also consider risk analysis and cost-effectiveness analysis.

200862.1 Creating Change and Innovation

Credit Points 10 **Level** 3

Equivalent Units

200570 Management of Change, H3741 Management of Change

....

This unit introduces the concepts of change and innovation as they relate to organisational transformation of businesses. The unit is driven by theory and practice, and students deal with conflicting viewpoints to understand the complexity of the organisational relationships involved in change and innovation. To prepare students for their management roles, the unit reviews the challenges

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 315

associated with developing sustainable, innovative, and creative organisations and includes assessments that facilitate student engagement with elements of organisational change and innovation.

100856.4   Creative Non-Fiction

Credit Points 10 **Level** 3

Assumed Knowledge

A good standard of written expression

Equivalent Units

CT209A - Texts and Techniques

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit provides students with an advanced understanding of the issues, processes and practical questions involved in the writing of creative non-fiction. It is intended that students will gain both enhanced theoretical knowledge of writing practices and, through workshop participation and practical exercises, develop both their own writing skills and the ability to critique the writing of others on the basis of sound understanding of the characteristics of the genre.

100859.3   Creative Writing Project

Credit Points 10 **Level** 3

Assumed Knowledge

It is highly desirable that students should have successfully completed one of the following Level 2 units: 100896 - Writing Fiction, 100856 - Creative Non-Fiction or 101011 - Writing Poetry

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit extends students beyond the writing of individual stories and poems into larger areas of creative writing, such as the discontinuous narrative, the novella, and the cycle of related poems and/or stories. It involves students in the process of developing a major project from an initial set of ideas, through the stages of drafting to a "finished" product, using workshop techniques, individual interviews and peer critiquing. It aims to give each student some experience of a relationship with readers (fellow students) and an editor (the tutor).

102211.1   Creativity, Innovation and Design Thinking

Credit Points 10 **Level** 2

Special Requirements

Students must be enrolled in The Academy @ UWS or at the discretion of the Director of Academic Program and/or Head of The Academy and must have successfully completed 40 credit points of study.

....

The aim of this cross-disciplinary unit is to encourage students to explore their creative potential and broaden their perspectives of innovation through the lens of design thinking. Design thinking offers a range of strategic and practical approaches to both creativity and innovation including an understanding of stages of thinking and reflection; an evaluation of the dynamics of team work; the workings of conversation and dialogue to generate new thinking about complex problems. Students will learn about design thinking methodologies, and apply these towards addressing broader social issues in innovative and creative ways.

102376.1   Creativity: Theory and Practice

Credit Points 20 **Level** 7

Special Requirements

Students must have gained entry into 1827 Master of Arts (Creative Arts) degree or the Master of Research degree.

....

Research in communication arts utilises a range of investigative procedures appropriate to the theory and practice of each creative arts discipline. This unit will introduce fundamental research languages, methods, and outcomes relevant to the creative arts disciplines, and encourage students to develop approaches best suited to their theory and practice. Students will write and defend a research proposal and paper for a research program: the unit will enable students to apply a rigorous research framework to their work. Students will engage with a range of significant and critical texts which address the broad implications of practices and theories in creative arts disciplines.

102315.1   Crime Fiction

Credit Points 10 **Level** 3

Special Requirements

Completion of 60 credit points of study.

....

This unit will introduce students to a variety of texts drawn from the history of crime fiction; including the classic detective story, the Golden Age mystery, US 'Hard Boiled' fiction, the police procedural, and the literary crime novel. Students will develop their knowledge of theories of genre, specifically its formation and evolution, and its implications for the process of making meaning. They will learn about the changing place of crime fiction within the English literary canon, exploring the genre's relationship to questions of artistic value, the distinction between high and low culture, and the differences between literary and popular fiction.

300873.2   Crime Scene Investigation

Credit Points 10 **Level** 2

Prerequisite

300806.1 Forensic Science AND **300874.1** Digital Forensic Photography

Equivalent Units

300374 - Crime Scene Investigation

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 316

Incompatible Units

300746 - Evidence & Crime Scene Management

Special Requirements

Students must be enrolled in 3589 Bachelor of Science (Forensic Science) or 3562 Bachelor of Science (Advanced Science)(Forensic Science). Students must have a crime scene suit for the simulated crime scene assessment. Students must supply their own grip kit including; forensic linear scales, a magnifying glass, markers, writing material, clip board, small measuring tape.

....

A substantial amount of forensic evidence used in the prosecution of criminal cases is initially established at the crime scene. Recognising, detecting, recovering, preserving and recording this evidence forms a critical function within forensic science and criminal investigation. This unit introduces the student to a range of crime scene practices that provides the knowledge and skill to interpret a complex scene with voluminous detail, into a more specifically targeted range of forensic evidence items. This unit will explore aspects of crime scene investigation including; crime scene processes, recognition of evidence, documentation of crime scenes, evidence detection and enhancement, maintaining evidence integrity and bloodstain pattern analysis. It also introduces professional practices associated with maintaining evidence integrity and continuity.

200010.2 Criminal Law

Credit Points 10 **Level** 2

Corequisite

200006.2 Introduction to Law

Equivalent Units

69000 - Criminal Law, F1005 - Criminal Law, LW106A - Criminal Law

....

This unit introduces students to the basic principles of criminal law and criminal responsibility and the criminal justice process as located in its broader social and political context.

300871.1 Culinary Science

Credit Points 10 **Level** 3

Prerequisite

300879.1 Experimental Foods

Equivalent Units

300715 - Culinary Science, 300640 - Culinary Studies

Special Requirements

Students require personal protection equipment e.g. apron and close in shoes.

....

This unit applies scientific principles to the development, preparation and presentation of food products. Students are encouraged to become autonomous learners through problem-solving activities and experiential techniques. Students integrate and apply knowledge and skills from

areas such as chemistry, biology, food science and nutrition to nutritionally focussed food products. Students are encouraged to keep abreast of food trends in the dynamic food industry as well as current nutritional issues within domestic, multicultural and indigenous communities. Students will utilise prior knowledge and skills to address specific nutritional issues and the development of new food products to fit within these boundaries.

101590.2 Cultural and Social Geographies

Credit Points 10 **Level** 2

Equivalent Units

700055 - Cultural and Social Geographies (UWSC)

....

Examines the nexus between culture and place. Contemporary cultural planning issues include; local community relations, social planning, place management, place redefinitions, selling place, ethnic concentration, cultural precincts, and the spatial politics of gender and sexuality. The roles of cultural products in carrying spatial information and reinforcing identity are examined. Introduction to cultural and social geography, and developments in cognate fields of cultural studies and anthropology. Key theories of identity. Case studies range across religion, gender, sexuality, class and nationalism. The analysis and assessment advances a politics of difference, anti-racist, social justice perspective.

101967.1 Cultural History of Books and Reading

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit examines the development of the book as a material and cultural object, and the evolution of cultures of reading from codex and clay tablet to digital book and e-Reader. Exploring the historical and technical change taking the book from singular object (painstakingly copied by hand and read by a learned elite) to 'book' as notional object (deliverable 'content', in a range of formats, to readers on demand), this unit focuses on moments of contestation and crisis in reading, writing and print culture: copyright and the role of authorship, censorship, the plundering of libraries, and that most radical proscription, book-burning.

102185.1 Culture, Discourse and Meaning

Credit Points 10 **Level** 3

Incompatible Units

101408 - Critical Discourse Analysis

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

In Culture, Discourse and Meaning students explore our culture by looking closely at how we make and share

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 317

meaning. You look at how power operates by supporting and promoting some ideas and ways of life but not others. In Culture, Discourse and Meaning you also consider how students might change our culture. In your work in the unit, you will develop analytical, interpretive, and critical skills for culture analysis. Through project-based work, students will develop the capacity to analyse and critique the production and operations of power and consider changes in cultural practice.

400866.3   Culture, Diversity and Health

Credit Points 10 **Level** 2

Equivalent Units

700072 - Culture, Diversity and Health (UWSC)

....

This unit introduces skills for understanding and engaging effectively with the culturally and socially diverse world in which we live and work. Indigenous Australia is a major theme and students will gain an appreciation of the achievements and needs of Indigenous Australians. The unit examines cultural awareness more broadly and puts these issues in the context of health professionals working in multi-cultural settings and handling culturally different health philosophies and practices. Cultural diversity is increasingly recognised as a major issue in the delivery of health care and a major determinant of Indigenous health.

300997.1   Data Communications

Credit Points 10 **Level** 3

Prerequisite

300057.3 Signals and Systems

Incompatible Units

300010 - Data Networks

....

This unit is concerned with the principles and topics of fundamental importance to digital data communication, computer communication networks and telecommunications. The lower layers of the protocol structure (physical layer, data link layer and some aspects of the network layer) and the physical medium (hardware and transmission lines) are emphasized. An engineering approach will be taken to provide an insight to transmission and transmission media, communication techniques and transmission efficiency.

301044.1   Data Science

Credit Points 10 **Level** 7

Assumed Knowledge

Basic Statistics, Computer Programming

....

The explosion of data in the internet age opens up new possibilities for agencies and business to better serve and market to its customers. To take full advantage of these opportunities requires the ability to consolidate, manage and extract information from very large diverse data sets. In science, data sets are growing rapidly, with projects routinely generating terabytes of data. In this unit we examine the software tools and analytic methods that

underpin a successful Data Science Project and gain experience in big data analytics.

300103.3   Data Structures and Algorithms

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals OR **300027.2** Engineering Computing

Corequisite

200025.2 Discrete Mathematics OR **200237.3** Mathematics for Engineers 1 OR **300699.2** Discrete Structures and Complexity

....

This unit introduces students to fundamental data structures and algorithms used in computing. The material covered forms the basis for further studies in programming and software engineering in later units and for further training in programming skills. The unit focuses on the ideas of data abstraction and algorithm efficiency. The issues of computational complexity of algorithms are addressed throughout the semester. The topics covered include the fundamental abstract data types (lists, stacks, queues, trees, hash tables, graphs), recursion, complexity of algorithms, sorting and searching algorithms, binary search trees and graphs.

300104.4   Database Design and Development

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming skills, including variable declaration, variable assignment, selection statement and loop structure.

Equivalent Units

700011 - Database Design and Development (UWSC)

Incompatible Units

200129 - Database Management System for Business Information Systems.

....

The main purpose of this unit is to provide students with an opportunity to gain a basic knowledge of database design and development including data modeling methods, techniques for database design using a set of business rules that are derived from a case study and finally implementation of the database using a commercial relational database management system. The unit also examines a number of important database concepts such as database administration, concurrency, backup and recovery and security. At the same time student learning and intercommunication skills are enhanced by running tutorial presentations and group assignments.

300941.1   Database Design and Development (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming skills, including variable declaration, variable assignment, selection statement and loop structure.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 318

Incompatible Units

200129 - Database Management System for Business Information Systems, 300104 - Database Design and Development

Special Requirements

Students must be enrolled in 3685 Bachelor of Computing (Information Systems) Advanced, 3684 Bachelor of Information and Communication Technology (Advanced) or 3688 Bachelor of Information Systems Advanced.

....

This unit covers the principles, methodologies and technologies for the database design and development, exploring in particular the data modelling methods and the use of the language SQL for the database applications. The unit also examines a number of important database concepts such as database administration, concurrency, backup and recovery, and security. Students in this advanced unit are furthermore required to investigate new technological and theory advances in the database industry and apply them to the solution of concrete database problems.

700011.3 Database Design and Development (WSTC)

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming skills, including variable declaration, variable assignment, selection statement and loop structure.

Equivalent Units

300104 - Database Design and Development

Special Requirements

Students must be enrolled at Western Sydney University, The College unless specific approval is given by Western Sydney University. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7067 Diploma in Information and Communications Technology Extended or 7083 Bachelor of Information and Communications Technology Extended (WSTC FYP) must pass 700199 Academic Communication 2 (WSTC Prep) or 700208 English for Tertiary Study 2 (WSTC Prep) or 700210 Introduction to Academic Communication 2 (WSTC Prep) and must pass 700201 Computer Studies (WSTC Prep) before enrolling in this unit.

....

The main purpose of this unit is to provide students with an opportunity to gain a basic knowledge of database design and development including data modeling methods, techniques for database design using a set of business rules that are derived from a case study and finally implementation of the database using a commercial relational database management system. The unit also examines a number of important database concepts such as database administration, concurrency, backup and recovery and security. At the same time student learning and intercommunication skills are enhanced by running tutorial presentations and group assignments.

100996.3 Death and Culture

Credit Points 10 **Level** 3

Equivalent Units

SS240A - Death and Culture, 100902 - Death and Culture

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit is a critical introduction to the social practices surrounding death in modernity. Although primarily addressing social arrangements in the West, the unit examines the bio-politics of death in a wider cultural framework, with attention to geographies of power and economic influence. The unit traces the historical development of concepts of the individual; the impact on Western ideas around death of genocide and modern warfare; and assesses contemporary ethical, social and medical controversies (like euthanasia and the trade in body parts). The unit attempts to demonstrate the relationship of death to: social institutions; ideas of community and the construction of self in modernity.

102341.1 Debates in Global History

Credit Points 10 **Level** 7

Assumed Knowledge

History and Political Thought Major, International Relations and Asian Studies Major or equivalent.

....

The unit considers the history of the ways that different regions of humanity have interacted, since 1400. The unit will consider such topics as: ethnic-centrism (how to address it in historical and political knowledge?); the era of 'Pan Asia' (what does the rise of China and India mean for historical and political studies?); the prominence of 'nation' in historical knowledge (how to treat human history as 'global'?); the relationship of ethno-nationalism to globalization; the periodization of global history (turning points in the emergence of a global humanity); the determinants of difference and commonality in human history; the characteristics of 'empires'; the natural limits of humanity.

100903.2 Democracy in Asia

Credit Points 10 **Level** 3

Equivalent Units

63033 - Democracy in Asia.

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit is concerned with the theory and practice of democracy in modern and contemporary history of Asia. It explores a range of issues relating to liberalism, human rights, political reform and democratization. It seeks to explain the differences in the ways in which democracy has been conceived, understood and practiced in different

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 319

Units

cultures and societies. It also examines the East-West debate on "Asian values" and the suitability of Western-style democracy to Asia. Finally, it discusses the prospects for democracy in Asia.

200079.3   Derivatives

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of mathematics and statistics equivalent to that required for 200052, Introduction to Economic Methods.

Prerequisite

200052.5 Introduction to Economic Methods AND **200488.3** Corporate Financial Management

Equivalent Units

61344 - Risk Management, H3686 - Options, Futures and Derivitive Products

....

This unit provides an introduction to the major classes of derivatives: forwards, futures, swaps and options. It examines how these instruments can be used by companies for the purposes of hedging, speculation and arbitrage. Each of these categories of derivatives is examined in some detail. Considerable attention is also given to various models used to price derivative products. The historical background to contemporary risk management is also considered.

401116.1   Dermatology and Gerontology

Credit Points 10 **Level** 4

Prerequisite

400981.2 Clinical Pharmacology AND **401182.1** Pharmacology for Podiatrists AND **401180.1** Musculoskeletal Disorders and Imaging

Incompatible Units

400939 - Podiatric Techniques 3A and 400940 - Podiatric Techniques 3B

....

This unit builds on previous clinical and theoretical units to develop in-depth knowledge in dermatology and gerontology. Foundations of dermatology including the function and structure of the skin, assessment, differential diagnosis, aetiological factors and the management of disorders of the skin, with particular emphasis on common foot conditions and co-morbidities will be investigated. Population's trends, aging norms, pathology, co-morbidities and attitudes to aging will be explored. Particular focus will be placed on pathophysiology, mechanics, diagnosis and treatment options to maintain normal daily activities.

301086.1   Design Brief Formulation

Credit Points 10 **Level** 3

Prerequisite

300729.2 Graphic Communication and Design

....

This unit explores the process of formulating the quantitative and qualitative requirements for a complex construction project. Students will analyse and evaluate competing parameters for a specific building project which contains residential, commercial and community facilities.

301093.1   Design Management 1: Process and Manufacturing

Credit Points 10 **Level** 2

Equivalent Units

300012 - Design Management 1: Product Design Audit

....

This unit introduces students to strategic planning for new product development. Students will learn how to develop ideation into implications for manufacturing, costs and delivery; for example linking decisions on materials with decisions on manufacturing processes. Students will also be introduced to practical methods for combining user-centred design with project management.

301082.1   Design Management 2: Operation and Supply Chain

Credit Points 10 **Level** 2

Equivalent Units

300013 - Design Management 2: Corporate Image and Identity

....

This unit focuses on how design management processes can connect suppliers with consumers. Students will learn about the evolution of different manufacturing environments: the development of craft manufacture, batch processing, flexible manufacture along with 21st century lean start-up and entrepreneurship models. The unit engages topical areas including integrative manufacturing planning, value chain analysis, industry reflection, and strategic decision making. Learning activities include an industry-based audit, a business redesign, and an innovation futures proposal.

300014.3   Design Management 3: Organisational Skills for Designers

Credit Points 10 **Level** 3

Assumed Knowledge

Ability to use: e-mail, internet web browser, WebCT or equivalent, word processing program. Knowledge and/or experience in: referencing, essay writing, group work and the successful completion of Level 2 units would be of advantage and will be assumed.

Equivalent Units

10886 - Design Management 3B: Professional Practice

....

Key learning outcomes include that students: understand manufacturing paradigms and their impact on the product development process and the design process; understand the impact of organisational structures, strategies and processes on the design process; develop and gain experience of using key skills that will enable them to work successfully with various organisational members in the product development process. These skills include

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 320

teamwork, decision-making and communication, analysis and problem solving. Develop and gain experience of using distance communication and virtual teamwork skills, skills that are becoming increasingly important in new product development.

301094.1 Design Management 4: Strategy and Lean Start-Up

Credit Points 10 **Level** 4

Equivalent Units

300015 - Design Management 4: Design Process

Special Requirements

Students must have completed 160 credit points to enrol in this unit. Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

This unit builds on earlier design management study and focuses on entrepreneurial innovation and lean start-up models using design-led strategies such as canvass modelling, minimum viable product (MVP), and launching. These strategies can be used for creating dynamic and adaptive organization for business, government and wider communities. Students will work in cross functional teams to deliver a mature value proposition for validation and launch of a market-ready product or service; and will be encouraged to seek external funding for their ideas, for example through crowd-funding websites.

300016.2 Design Science

Credit Points 10 **Level** 1

Equivalent Units

700126 - Design Science (UWSC)

....

An explanation and description of how the built environment works is essential to designers and construction professionals. This unit provides an introduction to physical units of measurement, tolerance, statics, acoustics and thermal properties. It also allows students to interpret and apply the concepts of electricity, energy, work and power to the built environment. Students engage with these concepts through a hands-on learning experience including practical projects and live demonstrations.

700126.1 Design Science (UWSC)

Credit Points 10 **Level** 1

Assumed Knowledge

The content of any NSW HSC Mathematics subject

Equivalent Units

300016 - Design Science

Special Requirements

Students must be enrolled at UWSCollege in 7015 Diploma in Construction Management; 7016 Diploma in Construction Management Fast Track; 7042 Bachelor of Construction Management (UWSC First Year Program); 7065 Diploma in Construction Management Extended; 7081 Bachelor of Construction Management Extended (UWSC First Year Program).

....

An explanation and description of how the built environment works is essential to designers and construction professionals. This unit provides an introduction to physical units of measurement, tolerance, statics, dynamics, acoustics and thermal properties. It also allows students to interpret and apply the concepts of electricity, energy, work and power to the built environment. Students engage with these concepts through a hands-on learning experience including practical projects and live demonstrations.

700126.2 Design Science (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

The content of any NSW HSC Mathematics subject

Equivalent Units

300016 - Design Science

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7015 Diploma in Construction Management or 7065 Diploma in Construction Management Extended or 7042 Bachelor of Construction Management (UWSC FYP) or 7081 Bachelor of Construction Management Extended (UWSC FYP) must pass 700144 Foundation Physics 1 (UWSCFS) before enrolling in this unit.

....

An explanation and description of how the built environment works is essential to designers and construction professionals. This unit provides an introduction to physical units of measurement, tolerance, statics, dynamics, acoustics and thermal properties. It also allows students to interpret and apply the concepts of electricity, energy, work and power to the built environment. Students engage with these concepts through a hands-on learning experience including practical projects and live demonstrations.

301073.1 Design Studio 1: Patterns and Products

Credit Points 10 **Level** 1

Equivalent Units

300776 - Applied Ergonomics

Special Requirements

Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 321

This is the first in a series of six units in which students learn experientially through project work and problem solving by design. The project work in this unit introduces the basics of ergonomics and anthropometrics and also the concept of prototyping; from low-fidelity to high fidelity, as components in the CDIO (Conceive, Design, Implement, Operate) design process framework. Students will employ design science and user-centred design methods to explore design solutions that incorporate elements of pattern, sequencing, geometry and structure.

301075.1   Design Studio 2: Form and Production

Credit Points 10 **Level** 1

Equivalent Units

301036 - Form and Production; 300462 - Engineering and Design Concepts

Special Requirements

Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

This unit equips students with the skills to use creative design and structured decision making to solve challenging problems. Students will be introduced to design and logical thinking, experience from quick mock-ups and designs to 3D rapid prototyping, multimodal recording of ideas through digital and non-digital means. They will also reflect upon the design process through the CDIO framework (Conceive, Design,Implement, Operate) and CAD (Computer-Aided Design).

301078.1   Design Studio 3: Design, Process and Function

Credit Points 10 **Level** 2

Prerequisite

301075.1 Design Studio 2: Form and Production

Equivalent Units

300305 - Design Studio 1: Themes and Variations

Special Requirements

Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

Students will undertake projects with semi-open briefs, where they are asked to address a given theme and achieve specific outcomes such as sustainability criteria or costing targets. They will follow the CDIO (Conceive, Design, Implement, Operate) framework to develop designs to the stage of working prototypes with a clear plan of how the product will work in a real setting. This will include making a digital and/or mechanical representation, and also mapping how the product meets functional requirements both as a prototype and in the longer term as a finished product.

301080.1   Design Studio 4: Innovation through Systems Thinking

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed students have completed Graphics 3 and are proficient in computer solid modelling. Knowledge of plastic manufacturing is also essential.

Prerequisite

301078.1 Design Studio 3: Design, Process and Function

Equivalent Units

300308 - Design Studio 2: The Design Proposal

Special Requirements

Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

This unit explores strategies for Industrial Design within the complex context of design work in the 21st century. Students will carry out projects in user-centred design, developing an innovative responses to a semi-open and open briefs using the CDIO (Conceive, Design, Implement, Operate) process. The projects will range from low fidelity cardboard prototypes to more fully developed everyday products and services that can be implemented and operated to meet an identified user need.

301083.1   Design Studio 5: Symbol and Meaning Making

Credit Points 10 **Level** 4

Prerequisite

301080.1 Design Studio 4: Innovation through Systems Thinking

Equivalent Units

300311 - Design Studio 3: Product Realisation

Special Requirements

Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

Cultural values and human activities are central to explaining successful interactions in our built environment. Values will be explored through project work defined by an evolved open design brief and by student's new designs combining digital and physical components. Students will be introduced to models of culture and challenged to reinterpret identity through a functioning product set in a contextual modern world reality.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 322

301084.1   Design Studio 6: Ambience, Place and Behaviour

Credit Points 10 **Level** 4

Prerequisite

301083.1 Design Studio 5: Symbol and Meaning Making

Equivalent Units

300313 - Design Studio 4: Simulate to Innovate

Special Requirements

Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

Designers responding to complex societal challenges require focus on people, places and systems thinking to make sense in guiding new investment in innovation. This unit builds industrial design expertise in four domains including human environments, responsible design, user-centred design, and technology development through applied design research, contextual inquiry methods, and articulation of innovation proposals through conceptual and validated physical modelling, and an interdisciplinary consultative viewpoint.

200918.1   Design Thinking for Creativity

Credit Points 10 **Level** 3

Assumed Knowledge

Students should have a foundation knowledge of business markets and innovation theory.

Special Requirements

Successful completion of 80 credit points.

....

Innovation and creative thinking are important skills in strategy development. Part of this process is the ability to solve problems and discover new opportunities; or in other words, the notion of "design thinking". This unit introduces students to concepts and frameworks to create innovative products, services and systems for a range of enterprises, industries and markets. Students will explore and analyse business and social networks, clusters and ecosystems via practice based projects. Design thinking principles will be applied to systematically develop ideas into innovative solutions as a way to drive business growth.

102159.1   Designing Curriculum Futures

Credit Points 10 **Level** 7

Equivalent Units

101660 - Curriculum Futures

....

This unit considers the research and theoretical basis of curriculum futures, with a focus on design for learning and learning design, and critically examines contextual factors and their implications for learning design in a range of settings. The unit provides a critical overview of perspectives on curriculum, curriculum design and examines authentic learning and assessment. Examples of curriculum futures will be negotiated and explicated. The overall focus is on curriculum decision-making and planning for improved learning outcomes.

101636.2   Developing Sustainable Places

Credit Points 10 **Level** 7

Equivalent Units

101345 - Land Use Strategy Design, 101311 - Urban Challenges: Developing Sustainable Places

Special Requirements

Students must be enrolled in a postgraduate course.

....

This unit provides an understanding of environmental, economic and social issues arising from the effects of urban development within city regions and examines the relationship between sustainable development and metropolitan planning in the Australian and global context. It focuses on the concepts related to sustainability, sustainable development and sustainable cities. It also looks into recent initiatives towards the realisation of sustainable cities.

300111.2   Developing Web Applications with XML

Credit Points 10 **Level** 3

Assumed Knowledge

300582-Technologies for Web Applications, 300580-Programming Fundamentals

....

This third year unit provides a comprehensive coverage of XML, related emerging technologies and their use in web applications. Students will be given opportunities to develop web based information systems which rely upon these technologies. This unit is heavily oriented to practical based work.

101896.1   Development and Security

Credit Points 10 **Level** 7

Prerequisite

101895.1 Political Economy of Development

Special Requirements

Students must be enrolled in a postgraduate course.

....

Successful development requires the provision of security. As a corollary, lack of development can breed insecurity and violence. The overall nexus between development and security is not only about a country's domestic affairs; it concerns the global community. Amid the increasing pace of globalisation, underdevelopment in the global South is argued to constitute a security threat by supposedly facilitating the international spread of terrorist and criminal networks. This unit will concentrate on three key aspects. First, it will interrogate the complex relationship between development and security from interdisciplinary perspectives. This will cover, among other, the notions of development as security, human development, human

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 323

security and social sustainability. Second, this unit will examine the development roots of insecurity focusing on social and economic structures and key issues in development and security from local and global perspectives as well as from micro and macro outlooks. This includes peace keeping operations, security measures, and global governance for world order. Third, relevant case studies will be embedded throughout the unit contents to enhance students' analytical skill and practical orientation on the field of development and security.

300723.2   Development Control

Credit Points 10 **Level** 2

Assumed Knowledge

Basic understanding of residential construction.

Equivalent Units

BG303A - Development Control

Incompatible Units

200435 - Property Development Controls

....

This unit provides an overview of development control and associated legislation. These include: interpretation of planning law as it relates to the development application process; the assessment of applications for approval for development as an integrated process; the evaluation of the impact assessment process; appropriate consideration of urban design, streetscape, heritage and conservation issues; and the evaluation of the impact of parking, traffic, landscape and services in development proposals.

101897.1   Development for Equality

Credit Points 10 **Level** 7

Prerequisite

101895.1 Political Economy of Development

Special Requirements

Students must be enrolled in a postgraduate course.

....

The eight Millennium Development Goals (MDGs) were established in 2000 as a blueprint to meet the needs of the world's poorest and quickly became the dominant paradigm driving global development. The goals were targeted to be met by 2015 but no country has yet to approach success in achieving the goals. This unit critically examines the MDGs and in particular their impact on and engagement with women and other groups who remain the poorest and most vulnerable across the globe. Through this critique students will identify the structures, institutions and systems producing global inequalities; the significance of dominant development discourses in creating and continuing inequalities; and the intersections with social categories such as race, gender, sexuality, disability, class, religion and ethnicity. In order to demonstrate their understanding and critique, students will design a program for a specific disadvantaged group in a targeted region with a particular need to be met, such that the proposed program can sit within a suite of programs so as to ensure the ultimate aim of sustainable development.

101682.4   Developmental Psychology

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of core concepts of personality, social and developmental psychology

Special Requirements

Prior to enrolling in this unit students must have submitted a Working with Children Check Student Declaration. This can be completed online through the NSW Office of the Children's Guardian website. Refer to Special Requirements on our website for details on applying for the Working with Children student declaration; link below: http://www.westernsydney.edu.au/currentstudents/current_students/enrolment/special_requirements

....

Structured around an overview of lifespan development including diversity, this unit explores the holistic nature of growth and development through developmental theory and research. This unit highlights the interactive nature of three main areas of development: biological, cognitive, and psychosocial changes that affect the individual from conception to end of life. The unit encourages observation as a means for understanding development and promoting individuals wellbeing. An understanding of Aboriginal and Torres Strait Islander development will be integrated into the unit alongside an appreciation of richness in diversity within various cultural contexts.

102188.1   Dictators, Democrats and Dreamers: Indonesia 1942 to now

Credit Points 10 **Level** 3

Incompatible Units

101972 - The History of Modern Indonesia

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit surveys the post-independence history of Indonesia, Australia's nearest and most important Asian neighbour. Commencing with the Japanese Occupation during World War II, it traces Indonesia's often turbulent contemporary history through dictatorship and poverty to democracy and prosperity, bringing the story up to the latest developments at the time of teaching. Students will study Indonesia's struggle for independence and then equally challenging struggle to build a new nation able to take its place in the world amidst serious economic problems and profound political differences. The unit is also concerned with the historiographical problems confronting students of Indonesian history.

200030.4   Differential Equations

Credit Points 10 **Level** 2

Assumed Knowledge

Algebra - competency in manipulation of algebraic terms including powers, sigma notation Elementary functions - polynomial, power, exponential, logarithmic, circular and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 324

hyperbolic, inverse functions Differentiation - derivatives of standard functions, product/quotient/composite function rules Integration - integrals of standard functions, change of variable, integration by parts

Incompatible Units

200238 - Mathematics for Engineers 2

Special Requirements

Students enrolled in 3621 Bachelor of Engineering or 3664 Bachelor of Engineering Science may not enrol in this unit.

....

Differential equations arise naturally both in abstract mathematics and in the study of many phenomena. This unit provides the theory of ordinary differential equations and an introduction to partial differential equations together with methods of solution. Examples are drawn from a wide range of biological, chemical, physical and economic applications.

102410.1   Digital Cultures

Credit Points 10 **Level** 3

Prerequisite

101906.2 Researching Culture

Equivalent Units

101980 - Culture, Society and Globalisation

Special Requirements

Students must have completed 60 credit points including the pre-requisite unit before enrolling in this unit.

....

This is the compulsory Level 3 capstone unit for the Cultural and Social Analysis major. It gives students essential skills for researching and analysing contemporary cultural and social processes through a digital lens. Key topics include youth and digital culture, digital citizenship, racism and the digital, film and games, and digital work and economies. Through this unit, students gain an understanding of how digital technologies transform everyday practices, meanings and identities, create new opportunities and problems for addressing societal challenges and explore what it means to participate in a digital society, now and in the future.

300874.1   Digital Forensic Photography

Credit Points 10 **Level** 2

Prerequisite

300806.1 Forensic Science

Equivalent Units

300375 - Digital Forensic Photography 1

Special Requirements

Students must be enrolled in 3589 Bachelor of Science (Forensic Science).

....

Forensic photographing forms and important function within forensic science for the purpose of detection, documentation and enhancement of perishable and non-perishable forensic evidence. This unit introduces the

student to the fundamental principles and practices of forensic photography. Topics include; conceptual and applied aspects of maintaining image integrity for forensic evidence, principles of light science, digital imaging, camera and lighting operations, concepts associated with visual communication in forensic science, and concepts associated with technical photography composition.

300874.2   Digital Forensic Photography

Credit Points 10 **Level** 1

Prerequisite

300806.1 Forensic Science

Equivalent Units

300375 - Digital Forensic Photography 1

Special Requirements

Students must be enrolled in 3589 Bachelor of Science (Forensic Science) or 3562 Bachelor of Science (Advanced Science) Forensic Science program (KT3149).

....

Forensic photography serves an important function within forensic science for the purpose of scene and item documentation, as well as the detection and enhancement of forensic evidence. This unit introduces the student to the fundamental principles and practices of forensic photography. Topics include: principles of light science, digital imaging, camera and lighting operations, technical photography composition, and the maintenance of image integrity.

101250.3   Digital Futures

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit examines the role of digital technologies in contemporary cultural production, exploring the impact digital technologies have had on the design and construction of images, spaces and bodies in the late 20th and early 21st centuries. The unit traces the development of technologies from analogue, to electronic, to digital, and analyses key topics in media studies including the cyborg, virtual reality, artificial life and simulation. The unit contextualizes conceptual issues with reference to design, film, art and new media works.

300069.3   Digital Signal Processing

Credit Points 10 **Level** 3

Assumed Knowledge

Students should be able to apply knowledge from 300005 - Circuit Theory; employ the basic principles of analysing an AC electric circuit; apply Kirchhoff's Voltage and Current laws and their use in electric circuits; apply Nodal analysis, mesh analysis and superpositiion analysis to AC electric circuits; utilise Laplace Transform and its applications to Electric Circuits; demonstrate the concept of Bode plot and frequency response; examine passive and active filters.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 325

Prerequisite

300057.3 Signals and Systems

....

This unit aims to provide an introduction to fundamental concepts and principles in digital signal processing. The subject matter includes discrete-time signals and systems, the z-transform, sampling of continuous-time signals, transform analysis of linear time-invariant systems, filter design techniques, structures for discrete-time systems, the discrete Fourier transform and computation of the discrete Fourier transform.

300018.2   Digital Systems 1

Credit Points 10 **Level** 1

Assumed Knowledge

Topics from 300021 - Electrical Fundamentals: Understand the basic principles of analysing an electric circuit; understand Kirchhoff's Voltage and Current laws and their use in electric circuits; understand the concept of operational amplifier and its circuit.

....

This unit provides students with a solid background in digital logic design. Students are introduced to the fundamentals of digital logic, basic logic devices and Boolean algebra. Analysis and design of combinational and sequential logic circuits is covered in detail.

700240.1   Digital Systems 1 (WSTC AssocD)

Credit Points 10 **Level** 1

Assumed Knowledge

Understand the basic principles of analysing an electric circuit, understand Kirchhoff''s Voltage and Current laws and their use in electric circuits.

Equivalent Units

300018 - Digital Systems 1

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit provides students with a solid background in digital logic design. Students are introduced to the fundamentals of digital logic, basic logic devices and Boolean algebra. Analysis and design of combinational and sequential logic circuits is covered in detail.

300019.4   Digital Systems 2

Credit Points 10 **Level** 3

Prerequisite

300018.2 Digital Systems 1

....

This unit covers modern logic design techniques and the process of creating logic circuits and systems from design specifications to implementation. Topics include logic design techniques for combinational and sequential logic circuits; hardware description language (HDL); logic circuit

implementation using an HDL; state-of-the-art logic circuit design tools; and programmable logic devices.

300880.1   Disaster and Emergency Management

Credit Points 10 **Level** 3

Equivalent Units

300449 - Environment, Health and Emergency Management, 300702 - Disaster and Emergency Management

Special Requirements

Successful completion of 60 credit points at Level 1 and 40 credit points at Level 2. Students are required to have access to a personal computer.

....

This unit explores the management of planning and preparation for and community responses to disasters and emergencies. Through case studies and presentations from current and cutting-edge professional practitioners in the field, students develop a 'hands on' understanding of risk assessment and prevention strategies for community safety during times of critical incidents. This includes emergency management strategies for community recovery and public education and preparation for potentially critical incidents. Workshop activities facilitate collaborative student learning through the use of developing scenarios including infectious disease pandemics, natural disasters and manmade emergencies such as terrorism.

101946.1   Discourse Analysis

Credit Points 10 **Level** 3

Prerequisite

101945.1 Introduction to Linguistics

Equivalent Units

101453 - Text and Discourse in English

....

This unit explores language at the discourse level, introducing different linguistic approaches used in the analysis of discourse. It provides a general overview of major theoretical frameworks and current issues in discourse analysis. It examines authentic spoken and written examples, and demonstrates how discourse analysis is relevant to other disciplines such as media and communication, education, cultural and gender studies, and so on.

301111.1   Discovery Project

Credit Points 10 **Level** 3

Assumed Knowledge

Completed the bachelor's degree units in the students primary discipline.

Prerequisite

301033.1 Introduction to Data Science AND **301108.1** Thinking About Data AND **301107.1** Analytics Programming

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 326

Corequisite

301034.1 Predictive Modelling AND **301109.1** Visual Analytics AND **301110.1** Applications of Big Data

....

In this unit students will gain experience in applying data science skills and using knowledge gained during their bachelor's course of their primary discipline. Students will carry out a real life project transforming data to knowledge under the supervision of an academic mentor. Students will develop a knowledge discovery project proposal and carry out a literature review highlighting the current status of the problem. Assisted by a mentor they will apply the data science skills learned through-out the degree and produce a final discovery project report and/or interactive project tool and give an oral presentation.

200025.2 Discrete Mathematics

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics or equivalent

Equivalent Units

ST107A - Discrete Mathematics, 14349 - Discrete Mathematics, 700010 - Discrete Mathematics (UWSC)

Incompatible Units

14950 - Algebra 1A and 1B, 14503 - Maths 3, 14323 - Maths for Computing, 300699 - Discrete Structures and Complexity

....

This Level 1 unit introduces set theory, symbolic logic, graph theory and some counting problems. It provides a solid foundation for further study in mathematics or computing.

300867.1 Disease Prevention and Control

Credit Points 10 **Level** 3

Assumed Knowledge

A background knowledge of microbiology, and epidemiology

Equivalent Units

300782 - Disease Prevention and Control

....

Changes in human lifestyles, rapid urbanisation, industrial expansion, environmental degradation, international migration and travel, shifting demography, sedentary behaviour and demands for mass-produced food have promoted diseases which challenge conventional healthcare practices. While obesity, diabetes, dementia, interpersonal violence, transport-related accidents, cardiovascular diseases and cancers predominate, the prevention and control of communicable conditions such as HIV/AIDS, hepatitis and influenza remain significant challenges. Epidemiological studies and technologies, such as Geographic Information Systems, help us to monitor the distributions of diseases and to identify their risk factors. Integrated population health management strategies which address these risk factors are necessary for effective disease prevention and control.

300115.3 Distributed Systems and Programming

Credit Points 10 **Level** 3

Prerequisite

300147.1 Object Oriented Programming OR **300581.1** Programming Techniques AND **300565.1** Computer Networking

....

This unit covers the concepts, design, and programming of distributed systems. It builds on basic network communication protocols (specifically IP) to cover client server programming using both the system level socket interface and remote procedure calls. It also examines large scale distributed system architectures particularly those based on distributed objects and considers the complexities inherent in distributed transactions. Key concepts covered include data and algorithmic distribution, idempotent protocols, stateless and statefull servers, and distributed system transparency. Illustrative case studies are included.

400961.1 Drugs on Line

Credit Points 10 **Level** 1

Equivalent Units

E1250 - Drugs On Line

....

This unit deals with selected issues in drug use, misuse and abuse. An introductory section discusses mechanisms of drug action in the body and their likely effects. Some topical areas include; drugs in society (illicit drug taking and drug taking in sports), antidepressants and weight management therapeutic agents, and the exploration of complementary alternative medicines (CAMs) in Australian society.

300480.2 Dynamics of Mechanical Systems

Credit Points 10 **Level** 3

Prerequisite

300035.3 Kinematics and Kinetics of Machines AND **300040.2** Mechanics of Materials

Equivalent Units

300020 - Dynamics and Mechanical Systems

....

This unit looks at how non-rigid components deform and oscillate. It looks at undamped and damped systems undergoing free vibration, steady state forced vibration and transient forced vibration. The principles of virtual work are used to investigate the equilibrium and dynamics of mechanisms.

300839.1 Ecology

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of first-year university biology satisfactory completion of Biodiversity and Cell Biology or equivalent

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 327

and the concepts of classification, evolution, taxonomy, cellular processes plant and animal structure and function.

Prerequisite

300802.1 Biodiversity OR **300816.1** Cell Biology OR **300813.1** Wildlife Studies OR **300824.1** Management of Aquatic Environments

Equivalent Units

EY210A - Ecology 2.1; 300634 - Ecology; EY201A - Ecology 2.1 (V1)

....

We live in a society where environmental problems dominate public debate. Ecology is one of the sciences required to find solutions to such problems; terms and ideas that came originally from ecology are used in public discussions, and in legislation. This unit will introduce students to ecology: what is studied, how it is studied, what are the strengths and limitations of ecology. Current ecological thinking will be covered, from the scale of individual organisms, through populations, and up to communities and ecosystems. Methods of study will be highlighted using evidence from molecular ecology through to field investigations.

200916.1   Economic and Financial Modelling

Credit Points 10 **Level** 3

Prerequisite

200032.5 Statistics for Business OR **200052.5** Introduction to Economic Methods

Equivalent Units

200053 - Economic Modelling

....

Economic and Financial Modelling examines regression analysis and its use in business especially in economics, finance and accounting. Topics will include the properties of estimators, hypothesis testing, specification error, multicollinearity, dummy variables, heteroskedasticity, serial correlation. It also introduces other modelling techniques in finance and economics. Empirical assignments undertaken by the student form an integral part of the unit. The emphasis is on learning by doing in small group workshops.

200537.4   Economics and Finance Engagement Project

Credit Points 10 **Level** 3

Special Requirements

Students in the following courses must have successfully completed 150 credit pointst: 2504 Bachelor of Economics, 2526 Bachelor of Economics/LLB, 2739 / 2753 Bachelor of Business and Commerce, 2741 / 2754 Bachelor of Business and Commerce (Advanced Business Leadership), 3655 Bachelor of Information and Communications Technology/ Bachelor of Business and Commerce, 3659 Bachelor of Science/ Bachelor of Business and Commerce, 2740 Bachelor of Business and Commerce / Bachelor of Laws.

....

This unit will provide students with exposure to problems with which economists and finance professionals are confronted in their daily work. They will learn about and examine the multi-dimensional nature of the issues addressed by economists and finance professionals in real-life. Students will need to consider the nature of the problems, propose solutions, as well as address how realistic the solutions they are proposing are. They will learn how to systematically reflect on their contribution to the industry or community setting with which they engage.

800174.1   Economies and Ecologies

Credit Points 10 **Level** 7

....

This unit examines how the economy is being reclaimed as a space of political decision in the Anthropocene, the new geological epoch in which human activity is having global impact on the Earth's ecosystems. It critically explores how different ways of thinking about economy shape the worlds we inhabit. It analyses contemporary examples of economic experimentation and human-non-human assemblages that are making 'other worlds' possible. It explores connections between ecological and economic thinking and asks how our conception of the economy and subjectivity changes when we consider the needs of other species as well as our own.

300856.1   Ecosystem Carbon Accounting

Credit Points 10 **Level** 3

Prerequisite

300837.1 Climate Change Science

....

A critical part of society's response to climate change is to measure the movement of greenhouse gases. Once this is done, steps taken to reduce these gases can be correctly targeted and the impact of such steps monitored. This unit will introduce students to the scientific measurement of greenhouse gas uptake and emissions, including assessment of uncertainties and verifiability of measurement. Ecosystem-level models will be used to estimate and quantify movement of greenhouse gases, allowing quantification of the net greenhouse gas emissions over the life cycle of a product. These approaches are vital steps in moving our society to a sustainable future.

800170.1   Ecosystems in a Changing World

Credit Points 10 **Level** 7

Assumed Knowledge

A Bachelor of Science in Biology, Environmental Science, or Agricultural Science, with some background in plant science and ecology.

....

Natural and managed ecosystems on our planet are experiencing a rapidly changing environment as a consequence of changing patterns of land and resource use, loss of biodiversity, altered atmospheric composition and anthropogenic climate change. This unit will introduce students to ecosystem concepts in the context of ecological and evolutionary responses to global change. Students will

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 328

obtain practical experience in quantitative analysis of carbon, nutrient, water and energy budgets, and explore the consequences of global change for ecosystem services and biodiversity over a range of spatial and temporal scales. Teaching will be led by HIE staff with expertise in ecosystem responses to environmental change, soil microbial contributions to ecosystem function and the impacts of environmental change on plants, animals and their interactions.

101263.1 Education and Transformation

Credit Points 10 **Level** 2

....

This unit provides opportunities for students to examine theories and practices associated with Transformative Learning in relation to their personal development as educators. Transformative Learning is learning that is empowering, deep and life changing. It and similar ways of approaching learning – the holistic, ecological and systemic - share a reflective base. All are inquiries into the relationships that make learning work. Students investigate these as theoretical and practical approaches to learning in real world settings: as powerful educational feedback systems. This unit combines the design and practical enactment of theoretically grounded approaches to socially relevant and personally meaningful learning.

101663.2 Education for Sustainability

Credit Points 10 **Level** 2

....

Increasingly, the need to develop sustainable ways of living that can reduce our ecological footprint and conserve precious natural resources for future generations is recognised as a critical concern of education at all levels. Developing 'sustainability literacy' requires new ways of thinking and learning that enable us to recognise the connections between environmental concerns, social patterns and individual actions. This unit approaches key issues in sustainability education with a learner-centred approach that builds skills for inquiry, analysis and creative action and involves a three-hour field trip. It promotes personal and social change, develops civic values and empowers learners to be leaders for a sustainable future.

101661.2 Education in a Cosmopolitan Society

Credit Points 10 **Level** 3

....

This unit responds to the question of what it might mean to educate "world teachers" for a cosmopolitan age where classrooms and schools are being shaped by the increasing mobility of ideas, people, technology, media and finance. For some time, multicultural education, as policy and practice, has dominated schooling in Australia. While this was an important period in Australia, times have changed. The globalisation of teaching is one dimension of this change as supranational bodies more and more shape what teachers do. Set against these global agendas are the mobilities that teachers must respond to at the local level. This unit examines cosmopolitan social and education

theory as a means to understand these dynamics, framing teachers as agents of change.

102160.1 Education Policy, Practice and Global Knowledge Co-construction

Credit Points 10 **Level** 7

....

This unit examines a range of inter/national policies and practices informed by the new spirit of capitalism that are impacting on contemporary education, and what this means for local/global knowledge co-construction. Consideration is given to the use of international tests as benchmarks, identification of 'best practice' and claims about evidence-based research in the redesign of education in Australia and elsewhere. Students will develop capabilities to use a new generation of conceptual tools that will enable them to engage through corrective and transformative critiques with inter/nationally driven arguments for curriculum and pedagogical change in the early childhood and school sectors, vocational and higher education.

300070.4 Electrical Drives

Credit Points 10 **Level** 3

Prerequisite

300071.2 Electrical Machines 1

....

The unit aims to introduce the study of electrical machines and drives. The subject covers various types of electrical motors and drive systems, their applications and control. The unit covers various types of the speed control, starting and braking systems and the dynamics of different electrical drives.

300021.2 Electrical Fundamentals

Credit Points 10 **Level** 1

Equivalent Units

700024 Electrical Fundamentals (UWSC); 700104 Electrical Fundamentals (UWSC Assoc Deg)

....

This unit is to introduce a number of concepts within electrical engineering. These include The basic definitions of charge, current, potential difference, power; Electric circuits and basic laws such as Ohms and Kirchoffs Laws; Thevenin, Nortons and the maximum power theorems; Capacitor and resistor circuits and time constants, An introduction to Electronics, communication waves, Logic gates and number systems and an introduction to Electrical Machines and Renewable Energy systems Basic principles are explained and applied to a range of typical electrical circuits and devices. These foundations provide students with the basic requirements for a career in engineering where the concepts can be developed or applied to more complex engineering systems.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 329

700024.2 Electrical Fundamentals (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300021 - Electrical Fundamentals, 700104 - Electrical Fundamentals (WSTC Assoc Deg)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7033 Bachelor of Engineering (WSTC FYP) or 7082 Bachelor of Engineering Extended (WSTC FYP) or 7034 Diploma in Engineering or 7066 Diploma in Engineering Fast Track must pass 700145 Foundation Physics 2 before enrolling in this unit.

....

The objective of this unit is to introduce to the student a number of concepts within electrical engineering. These include the basic definitions of charge, current, potential difference, power; electric circuits and basic laws such as Ohm's and Kirchoff's Laws; Thevenin, Norton's and the maximum power theorems; electromagnetism and the associated fundamental laws; capacitor and resistor circuits and time constants; an introduction to Electronics; communication waves; Logic gates and number systems; and an introduction to Electrical Machines and Renewable Energy systems. Basic principles are explained and applied to a range of typical electrical circuits and devices. These foundations provide students with the basic requirements for a career in engineering where the concepts can be developed or applied to more complex engineering systems.

300071.2 Electrical Machines 1

Credit Points 10 **Level** 3

Prerequisite

300052.2 Power and Machines

Equivalent Units

89010 - Electrical Machines

....

This unit introduces the fundamental principles of electrical machines: DC generators and motors, induction motors and synchronous machines. The unit also introduces various special purpose electrical machines, such as permanent magnet machines, step motors and reluctance machines.

300025.3 Electronics

Credit Points 10 **Level** 2

Assumed Knowledge

Topics associated with the unit 300464 - Physics and Materials: Vibrations and wave phenomena; Photoelectric effect, atomic structure and periodic table; Electricity and magnetism.

Prerequisite

300021.2 Electrical Fundamentals

Special Requirements

Students should have a sound understanding of: The basic principles of analysing an electric circuit; Kirchhoff's Voltage and Current laws and their use in electric circuits; Nodal analysis, mesh analysis and superposition analysis in DC electric circuits; Thevenin and Norton equivalent and their use in electric circuits; The storage elements capacitor and inductor and understand their performance in first and second order circuits.

....

This unit further develops skills in the analysis, design, practical implementation and testing of the main analogue electronic circuits. Topics covered are: semiconductor diodes and their applications, Bipolar Junction Transistors (BJT), Field Effect Transistors (FET), analysis of BJT and FET, design of discrete operational amplifiers, and operational amplifier characteristics and circuit configurations.

700242.1 Electronics (WSTC AssocD)

Credit Points 10 **Level** 2

Assumed Knowledge

Vibrations and wave phenomena; photoelectric effect, atomic structure and periodic table, electricity and magnetism

Prerequisite

700104.2 Electrical Fundamentals (WSTC AssocD)

Equivalent Units

300025 - Electronics

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit further develops skills in the analysis, design, practical implementation and testing of the main analogue electronic circuits. Topics covered are: semiconductor diodes and their applications, Bipolar Junction Transistors (BJT), Field Effect Transistors (FET), analysis of BJT and FET, design of discrete operational amplifiers and operational amplifier characteristics and circuit configurations.

300584.4 Emerging Trends in Information Systems

Credit Points 10 **Level** 3

Prerequisite

300573.2 Information Systems in Context AND **300582.2** Technologies for Web Applications

....

This unit provides a means for students to explore the changing nature of information systems in organisations. Specifically, the role that emerging technologies play in both the design and development of information systems is critically examined. Students will be able to research and assess new technologies, as well as develop and implement effective strategies for achieving change in

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 330

information systems based on the feasibility of the introduction of the technologies.

300942.2 Emerging Trends in Information Systems (Advanced)

Credit Points 10 **Level** 3

Prerequisite

300573.2 Information Systems in Context AND **300582.2** Technologies for Web Applications

Incompatible Units

300584 - Emerging Trends in Information Systems

Special Requirements

Students must be enrolled in 3685 Bachelor of Computing (Information Systems) Advanced or 3688 Bachelor of Information Systems Advanced.

....

In this unit students explore the changing nature of information systems in organisations. Apart from being encouraged to research and assess new technologies and implement effective strategies for achieving change within organisational information systems, in this advanced unit students will be required to undertake an individual, but closely supervised research project. The project will help stimulate inquiry, strengthen needs for academic research and encourage students to actively participate in new knowledge generation. Furthermore, students in this unit will be required to present their findings in a form of an academic paper with a possibility of publishing.

100860.3 Emotions, Culture and Community

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines forms of cultural expression and collective selfunderstanding articulated as emotional identifications. Topics covered may include shame, pride, responsibility, forgiveness,resentment, hope, disgust, generosity, happiness, hate and love. The unit explores how these have been taken up in contemporary cultural analysis as a focus for understanding affinities and conflicts between individuals and communities and for how Australians imagine their historical interconnectedness. It introduces some key theoretical perspectives that have been, and might be, applied to the study of emotions, culture and community.

100861.3 Empire: European Colonial Rule and its Subjects, 1750-1920

Credit Points 10 **Level** 2

Equivalent Units

63125 - The World Encircled 1100 - 1600

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

A historical investigation of the experience of the 19th century European empires from the perspectives of both the colonized and colonizers. It examines the combination of domination and cultural negotiation between colonizers and colonized. It examines both how peoples were managed as imperial subjects and how they responded to this management. It looks both at the effect of imperial rule on the colonized, and of empire upon the colonizers. It draws upon historical literature from a variety of sources and perspectives, and within European and Asian history. The focus is chiefly, though not exclusively, upon the British empire and its subject peoples.

102340.1 Engaging Discursive Fields

Credit Points 10 **Level** 7

Special Requirements

Students must have competed the Bachelor of Arts with Credit level pass or equivalent.

....

This unit creates an opportunity for intensive reading on the candidate's research project. Lectures and seminars direct students to identify classic texts, watershed publications, leading scholars, and current debates in their chosen field of research. While expanding their knowledge of existing scholarship, they will become aware of the discursive structures and academic protocols that govern their discipline. What theoretical approaches are used? What does the field of research require of its scholars? What makes their work authoritative? What sources do they use? What questions guide their research? In what context? How has the discursive field changed over time? Such questions direct the formulation of a research project of current relevance.

300027.2 Engineering Computing

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge in use of computers and Windows operating system

Equivalent Units

700018 Engineering Computing (UWSC); 700106 Engineering Computing (UWSC Assoc Deg)

....

Engineering computing is an introduction to using computation to solve real problems. The unit also aims to instil sound principles of program design that can be utilised in many units throughout the students' course. The basic elements and structures of a high level language are taught. Students are exposed to numerous engineering problems and are encouraged to implement solutions using an algorithmic approach.

700018.2 Engineering Computing (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge in use of computers and Windows operating system

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 331

Equivalent Units

300027 - Engineering Computing, 700106 - Engineering Computing (WSTC Assoc Deg)

Special Requirements

Only Western Sydney University, The College students can enrol in this unit unless specific permission has been granted by the School of Computing, Engineering & Mathematics. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7066 Diploma in Engineering Extended or 7082 Bachelor of Engineering Extended (WSTC First Year Program) must pass 700204 Introductory Programming (WSTC Prep) before enrolling in this unit.

....

Engineering Computing is an introduction to using computation to solve real problems. The unit also aims to instil sound principles of program design that can be utilized in many units throughout the students' course. The basic elements and structures of a high level language are taught. Students are exposed to numerous engineering problems and are encouraged to implement solutions using an algorithmic approach.

300481.2   Engineering Electromagnetics

Credit Points 10 **Level** 2

Assumed Knowledge

The students should have a good understanding of 300021 - Electrical Fundamentals

Prerequisite

200238.2 Mathematics for Engineers 2 AND **300963.1** Engineering Physics OR **300464.2** Physics and Materials

Equivalent Units

300022 - Electromagnetics, 300073 - Electromagnetic Compatibility

....

This unit introduces Maxwell's equations in integral and differential form and their application to basic theory and application of electromagnetic structures, wave propagation, guides waves, antennas and Electromagnetic compatibility.

301001.1   Engineering Geomechanics

Credit Points 10 **Level** 3

Prerequisite

300732.2 Structural Analysis AND **300985.1** Soil Mechanics OR **300731.2** Soil Engineering

Equivalent Units

300485 - Foundation Engineering

....

This unit will present the application of principles of soil mechanics to the solution of foundation and geotechnical problems including the evaluation of allowable bearing capacity of shallow and pile foundations, the stability of earth retaining structures and the stability of slopes.

300965.1   Engineering Materials

Credit Points 10 **Level** 1

Assumed Knowledge

HSC mathematics (not General Mathematics), physics and chemistry.

Equivalent Units

300462 - Engineering & Design Concepts (EDC), 700021 Engineering and Design Concepts (UWSC), 700105 Engineering and Design Concepts (UWSC Assoc Deg)

....

This unit will introduce fundamentals of engineering materials. The topics will include materials structure, properties, processing and applications, degradation of materials, sustainability, and the selection of materials for various engineering applications.

700152.2   Engineering Materials (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC mathematics (not General Mathematics), physics and chemistry

Equivalent Units

300462 - Engineering and Design Concepts, 300965 - Engineering Materials, 700021 - Engineering and Design Concepts (UWSC), 700105 - Engineering and Design Concepts (UWSC Assoc Deg), 700147 - Engineering Materials (UWSC Assoc Deg)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7033 Bachelor of Engineering (WSTC FYP) or 7082 Bachelor of Engineering Extended (WSTC FYP) or 7034 Diploma in Engineering or 7066 Diploma in Engineering Fast Track must pass 700145 Foundation Physics 2 before enrolling in this unit.

....

This unit will introduce fundamentals of engineering materials. The topics will include materials structure, properties, processing and applications, degradation of materials, sustainability and the selection of materials for various engineering applications.

300963.1   Engineering Physics

Credit Points 10 **Level** 1

Assumed Knowledge

HSC physics and HSC mathematics (not General Mathematics)

Equivalent Units

300464 - Physics and Materials, 700020 - Physics and Materials (UWSC), 700117 - Physics and Materials (UWSC Assoc Deg)

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 332

This unit serves as an introduction to the fundamentals of engineering physics with appropriate applications in a wide range of engineering and industrial design systems.

700151.2 Engineering Physics (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC physics and HSC mathematics (not General Mathematics)

Equivalent Units

300464 - Physics and Materials, 300963 - Engineering Physics, 700020 - Physics and Materials (UWSC), 700117 - Physics and Materials (UWSC Assoc Deg), 700153 - Engineering Physics (UWSC Assoc Deg)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7033 Bachelor of Engineering (WSTC FYP) or 7082 Bachelor of Engineering Extended (WSTC FYP) or 7034 Diploma in Engineering or 7066 Diploma in Engineering Fast Track must pass 700145 Foundation Physics 2 before enrolling in this unit.

....

This unit serves as an introduction to the fundamentals of engineering physics with appropriate applications in a wide range of engineering and industrial design systems.

300971.1 Engineering Project 1

Credit Points 10 **Level** 4

Corequisite

300741.2 Industrial Experience (Engineering)

Special Requirements

Students must be enrolled in the Bachelor of Engineering, 3740 Bachelor of Engineering (Honours) or Bachelor of Engineering Advanced (Honours) and have successfully completed 200 credit points.

....

This unit describes engineering as a profession, including professional ethics and legal obligations highlighted. Fundamentals and theories related to contract and project management will form part of this unit. Throughout the semester, the focus will be on development of research and presentation skills of students enrolled in this unit. This will be achieved through employment of appropriate research skills on a capstone project which demonstrates student's professional level of identifying, planning, and designing engineering project and completion of a technical progress report.

300972.1 Engineering Project 2

Credit Points 10 **Level** 4

Prerequisite

300971.1 Engineering Project 1

Corequisite

300741.2 Industrial Experience (Engineering)

Special Requirements

Students must be enrolled in the Bachelor of Engineering, 3740 Bachelor of Engineering (Honours) or Bachelor of Engineering Advanced (Honours) and have successfully completed 240 credit points.

....

Throughout the semester, the focus will be on development of research and presentation skills of students enrolled in this unit. This will be achieved through employment of appropriate research skills on a capstone project which demonstrates student's professional level of executing, testing and documenting an engineering project and completion of a technical report.

300967.1 Engineering Science Project 1

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in 3691 Bachelor of Engineering Science and must have successfully completed 180 credit points.

....

This unit describes engineering as a profession, including professional ethics, legal obligations and fundamentals and theories related to project management. The focus will be on development of research and presentation skills of students enrolled in this unit. It will be achieved through employment of appropriate research skills on a capstone project which demonstrates student's knowledge in identifying and planning an engineering project.

300968.1 Engineering Science Project 2

Credit Points 10 **Level** 3

Prerequisite

300967.1 Engineering Science Project 1

Special Requirements

Students must be enrolled in 3691 Bachelor of Engineering Science and must have successfully completed 180 credit points.

....

In this unit, the focus will be on development of research and presentation skills of students, which will be achieved through employment of appropriate research skills on a capstone project. It will demonstrate student's knowledge by conducting an engineering project and completion of a technical report.

300973.1 Engineering Thesis 1: Preliminary Investigations

Credit Points 10 **Level** 4

Special Requirements

Students must be enrolled in 3689 Bachelor of Engineering, 3728 Bachelor of Engineering (Honours)/Bachelor of Business or 3740 Bachelor of Engineering (Honours) and have successfully completed 220 credit points.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 333

....

The Engineering Thesis 1 - Preliminary Investigations unit consists of a research project designed and implemented under the direction of an academic supervisor and research mentor. This unit is the culmination of studies for students who have completed their undergraduate degree and provides substantial training in Preliminary Investigations. Under staff supervision, students are allocated a particular topic for their research, design their own programme of research, and perform the research. The emphasis of this unit is on the application of research knowledge gained in other units to the practical conduct of the individual research project. This unit provides final year engineering students with the opportunity to undertake research on a specialist topic within their Key Program of undergraduate study.

300974.1 Engineering Thesis 2: Detailed Investigations

Credit Points 10 **Level** 4

Prerequisite

300973.1 Engineering Thesis 1: Preliminary Investigations

Special Requirements

Students must be enrolled in 3689 Bachelor of Engineering, 3728 Bachelor of Engineering (Honours)/Bachelor of Business or 3740 Bachelor of Engineering (Honours) and have successfully completed 220 credit points.

....

The Engineering Thesis 2 - Detailed Investigations unit consists of a research project designed and implemented under the direction of an academic supervisor and research mentor. This unit is the culmination of studies for students who have completed their undergraduate degree and provides substantial training in detailed Investigations. Under staff supervision, students are allocated a particular topic for their research, design their own programme of research, and perform the research. The emphasis of this unit is on the application of research knowledge gained in other units and in Engineering Thesis 1 - preliminary Investigations to the practical conduct of the individual research project. This unit provides final year engineering students with the opportunity to undertake research on a specialist topic within their Key Program of undergraduate study.

300029.3 Engineering Visualization

Credit Points 10 **Level** 2

Assumed Knowledge

C++ Programming and 3-D Geometry

Prerequisite

300027.2 Engineering Computing

Equivalent Units

80151 - Computer Graphics

....

This unit is aimed to provide a comprehensive introduction to fundamental concepts and algorithms in engineering visualization. Topics covered include visualization hardware, scan conversion of geometric primitives, 2D and 3D transformations, 3D viewing and projection, hidden surface removal, solid modeling, illumination models and image manipulation.

700207.2 English for Tertiary Study 1 (WSTC Prep)

Credit Points 10 **Level** Z

Equivalent Units

700198 - Academic Communication 1 (UWSCFS); 700209 - Introduction to Academic Communication 1 (UWSCFS); 900074 - Academic English 1 (UWSC); 900102 - English for Tertiary Study 1 (UWSC); 900108 - Introduction to Academic Communication 1 (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Only available to International students.

....

This unit is designed to introduce International students to academic culture as a culture of critical debate and equip them with the academic literacy skills necessary to perform successfully in this culture. In particular, the unit aims to help International students access the conventions of academic English by focussing on attitudes to knowledge, and the ways in which ideas are structured and presented in academic texts and speech. The unit assists students to comprehend academic texts, identify key ideas and concepts, and identify and use the rhetorical moves used in academic texts. It also aims to help students compare and contrast ideas across texts, improve grammatical skills that relate to academic writing, summarise and synthesise information, and understand why, when and how to reference information. In addition, there is a focus on listening and pronunciation skills for International students.

700208.2 English for Tertiary Study 2 (WSTC Prep)

Credit Points 10 **Level** Z

Prerequisite

700207.1 English for Tertiary Study 1 (UWSCFS)

Equivalent Units

700199 - Academic Communication 2 (WSTC Prep); 700210 - Introduction to Academic Communication 2 (WSTC Prep); 900075 - Academic English 2 (WSTC); 900103 - English for Tertiary Study 2 (WSTC); 900108 - Introduction to Academic Communication 2 (WSTC)

Special Requirements

Students must be enrolled at Western Sydney, The College.

....

This unit is designed to expand upon and extend the academic literacy skills acquired in English for Tertiary Study 1. The unit will assist students to critically read and analyse a variety of texts, and to develop their research and writing skills to produce complex texts. There is a particular focus in this unit on critique and analysis in the process of understanding and producing academic texts.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 334

101976.2 English Literature After 1830

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit involves the study of texts from three specific periods - the Victorian, the Modernist, and Post World War II. Students will engage with the work of key writers from each era as a way of interrogating the social, political and cultural preoccupations of particular periods in literary history. Students will also examine the various critical traditions that have arisen in response to these writers' work.

101974.1 Enlightenment and Revolution

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The Enlightenment and Age of Revolutions are pivotal moments in Western and global history and had lasting political and cultural repercussions. This module seeks to explore links between them and to place them in wider intellectual and cultural context. Particular focus will be placed upon the paradigmatic French revolution, but within a framework emphasising other revolutions of the period. Hence individual classes treat society and government in Europe; the moderate and radical strands of enlightenment; precursors to the French revolution in the Atlantic world; the public sphere; the French revolution and Terror; Revolutionary Imperialism and Napoleonic rule; the revolutionary legacy.

200614.2 Enterprise Industrial Relations

Credit Points 10 **Level** 2

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61432 - Enterprise Industrial Relations

....

'Enterprise Industrial Relations' builds participants' analytical and research abilities, developing capacity to identify, diagnose and engage with industrial relations challenges from different stakeholder perspectives. Participants are challenged to make connections between the classroom to the real world of contemporary industrial relations, looking at individual employees' workplace and labour market experiences; the goals and activities of managers; and the role and practices of tribunals, enforcement agencies, employer associations and trade unions. This is done through activities that require working collaboratively on problems using online research to investigate contemporary practice, such as the drivers behind enterprise agreements and the implications of

institutional arrangements and trade unions for productivity, equity and human resource utilisation.

200911.1 Enterprise Innovation and Markets

Credit Points 10 **Level** 1

....

Enterprise Innovation and Markets introduces students to key concepts, business models and issues surrounding contemporary business. Students will develop an understanding of the private enterprise system competing on a global platform, business ethics and social responsibility, business ownership, market structure and innovation. Building on the foundation knowledge of the key principles of markets and public policy students will be able to transfer this knowledge into their subsequent study of specialist areas. The unit also aims to develop students' communication skills by working in teams to enhance their literacy proficiency in preparation for the more advanced units of the degree.

200909.1 Enterprise Law

Credit Points 10 **Level** 1

Equivalent Units

61511 - Introduction to Legal Principles, 200184 - Introduction to Business Law, 700004 - Introduction to Business Law (UWSC), 700079 - Introduction to Business Law (Creative Industries), 700254 - Enterprise Law (UWSC)

Special Requirements

External offerings are only available to students enrolled in a Property Major. Quarterly session offerings are only available to students enrolled in the Bachelor of Business or Bachelor of Business and Commerce, attending Offshore on-campus at the University of Economics, Ho CHi Minh City.

....

This is an introductory law unit designed to introduce the fundamentals of law in a commercial context. The unit introduces students to the basic principles of law and the legal system as well as examining some of the major areas of law that impact on commercial dealings. This unit examines the legal system, the way law is made and the main areas of law relevant to starting and running a business including contracts, negligence and consumer protection.

700254.1 Enterprise Law (WSTC)

Credit Points 10 **Level** 1

Prerequisite

700216.1 Introduction to the Australian Legal System (UWSCFS)

Equivalent Units

200184 - Introduction to Business Law, 200909 - Enterprise Law, 700004 - Introduction to Business Law (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 335

unit. The pre-requisite unit 700216 - Introduction to the Australian Legal System (WSTC Prep) mentioned above only applies to students enrolled in courses 7059 Diploma in Business and Commerce Extended, 7063 Diploma in Business and Commerce, 7064 Bachelor of Business and Commerce (UWSC First Year Program), 7071 Bachelor of Business and Commerce Extended (UWSC First Year Program), 7098 Diploma in Business, 7099 Bachelor of Business (WSTC First Year Program), 7102 Diploma in Business Extended, 7103 Bachelor of Business Extended (WSTC First Year Program), 7110 Diploma in Building Design Management Extended or 7111 Bachelor of Building Design Management Extended (WSTC First Year Program).

....

This is an introductory law unit designed to introduce the fundamentals of law in a commercial context. The unit introduces students to the basic principles of law and the legal system as well as examining some of the major areas of law that impact on commercial dealings. This unit examines the structure of the legal system, the way law is made, and the main areas of law relevant to starting and running a business including contracts, torts and consumer protection.

200912.1   Enterprise Leadership

Credit Points   10 **Level**   1

Equivalent Units

200571 - Management Dynamics

Incompatible Units

200879 - Introduction to Business Studies

....

Enterprise Leadership begins the development of the understanding of the role and function of business management and enterprise leadership concepts. Enterprise leaders need to balance a range of stakeholder perspectives in dynamic internal and external environments at local and global levels. Students are introduced to people, managerial and organisational processes designed to achieve enterprise leadership. Problem solving scenarios and experiential learning provide students with a foundation to develop personal and professional skills required to effectively manage their careers.

700252.1   Enterprise Leadership (WSTC)

Credit Points   10 **Level**   1

Equivalent Units

200571 - Management Dynamics, 200912 - Enterprise Leadership, 700003 - Management Dynamics (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Students enrolled in 7098 Diploma in Business, 7099 Bachelor of Business (WSTC First Year Program), 7102 Diploma in Business Extended or 7103 Bachelor of Business Extended (WSTC First Year Program) must have successfully completed 700248 Academic Skills for Business (WSTC Prep) before enrolling in this unit.

Students enrolled in 7065 Diploma in Construction Management Extended or 7081 Bachelor of Construction Management Extended (WSTC First Year Program) must have successfully completed 700200 Academic Skills for Construction Management (WSTC Prep) before enrolling in this unit.

....

Enterprise Leadership begins the development of the understanding of the role and function of business management and enterprise leadership concepts. Enterprise leaders need to balance a range of stakeholder perspectives in dynamic internal and external environments at local and global levels. Students are introduced to people, managerial and organisational processes designed to achieve enterprise leadership. Problem solving scenarios and experiential learning allow students to develop personal and professional skills required to effectively manage their careers.

300821.1   Environment and Health

Credit Points   10 **Level**   1

....

This unit introduces students to the holistic and socio-ecological nature of human health and its linkages with the socio-cultural and physical environment, focussing specifically on environmental noise as a significant risk to both physical and mental health. Students are challenged to identify and reflect on the underlying causes of traditional and contemporary environmental health issues and to explore the changing nature of environmental health, its professional practice, associated policy and the changing roles and responsibilities in government, business and industry. The unit introduces a range of health promotion and community education models for the design and evaluation of environmental health interventions.

301062.1   Environmental Building Design

Credit Points   10 **Level**   1

....

This unit explores the important parameters that are used to facilitate sustainable change in the built environment. Building design is a tool to minimise the use of scarce resources and reduce the impact on the natural Australian landscape. Improving the standard of liveability in urban and peri-urban communities is addressed through the development of holistic building design solutions.

300737.3   Environmental Engineering

Credit Points   10 **Level**   2

Prerequisite

300482.2 Engineering Geology and Concrete Materials AND **300762.2** Fluid Mechanics

Equivalent Units

85021 - Environmental Engineering

....

This unit outlines the essential issues of the environment that a civil and environmental engineer will address as a personal and professional contributor to the development of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 336

Australia. It has a bias towards water-related environmental issues.

300737.4 Environmental Engineering

Credit Points 10 **Level** 2

Equivalent Units

85021 - Environmental Engineering

....

This unit outlines the essential issues of the environment that a civil and environmental engineer will address as a personal and professional contributor to the development of Australia.

300981.1 Environmental Forensic Investigations

Credit Points 10 **Level** 3

Prerequisite

300806.1 Forensic Science AND **300843.1** Forensic and Environmental Analysis

Equivalent Units

300377 - Forensic Analysis of Physical Evidence, 300881 - Forensic Biology

Special Requirements

Safety glasses and laboratory coat, laboratory book and enclosed footwear. Forensic science grip kit containing small equipment items (linear scales, compass, tape measure etc). This grip kit is used in other forensic science units.

....

This unit examines the forensic processes required to conduct investigations into environmental crime and incidents. The unit extends the student's knowledge and understanding of forensic science concepts to environmental scenarios, including illegal dumping, spills and water pollution incidents. The unit will discuss how scenes are investigated, what methods and techniques are used to analyse environmental samples, and how the results are interpreted and presented in the NSW Land and Environment Court. Factors effecting the collection, analysis and interpretation of evidence, such as weathering, are also discussed, as these are crucial to understand the scenes and to correctly present evidence in court.

300857.1 Environmental Geochemistry

Credit Points 10 **Level** 3

Prerequisite

300808.1 Introductory Chemistry OR **300800.1** Essential Chemistry 1 AND **300803.1** Essential Chemistry 2

Equivalent Units

300614 - Environmental Geochemistry

....

The unit deals with how how the lithosphere, hydrosphere, biosphere and atmosphere are interconnected through global biogeochemical processes. Topics include-the composition of ocean, ground and surface waters and their interactions with the atmosphere, rocks, soils, sediments and man-made pollutants; transfer of dissolved material between environments, and detection and control of toxic waste materials; environmental quality criteria, field sampling and modelling of selected environmental systems. These topics will be brought to life in a two-day field trip to Sunny Corner undertaken in the mid-session break.

102339.1 Environmental Humanities

Credit Points 10 **Level** 7

....

This unit provides an overview of the emerging interdisciplinary field of Environmental Humanities. It provides a space of dialogue for Humanities, Arts and Social Sciences (HASS) and Science, Technology, Engineering and Mathematics (STEM) students to work collaboratively in developing novel ways of thinking about the relationships between culture and nature. The Unit centres on emerging conceptual trends interrogating notions such as: Anthropocene, extinction, planetary boundaries, critical zones, socio-ecological change dynamics, as a way of engaging with fundamental questions of meaning, justice, value, responsibility and purpose in a time of rapid and escalating change. The unit also focuses on methodological issues and tackles questions of co-construction between HASS and STEM disciplines.

301035.1 Environmental Informatics

Credit Points 10 **Level** 3

Prerequisite

300700.5 Statistical Decision Making OR **200263.5** Biometry OR **200032.5** Statistics for Business

....

Today, the environment is becoming more and more in the public eye. Methods of environmental monitoring and data analysis are an important source of information for science, business and government regulation. This unit aims to give students a good introduction to environmental informatics and the analysis of spatio-temporal data.

300840.1 Environmental Planning and Climate Change

Credit Points 10 **Level** 2

Equivalent Units

300629 - Environmental Planning; 300783 - Environmental Planning & Climate Change

Incompatible Units

300704 - Healthy Built Environments

....

This unit is an introduction to environmental planning in local and state government and in particular the role of planning in protecting the natural environment, enhancing population health and/or encouraging sustainable development practices. Students focus on goal-setting for environmental protection and then explore how planning policy can assist with achieving these goals. Current metropolitan planning and strategy is examined using the

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 337

Metropolitan Strategy for Sydney as the primary case study. The unit scopes environmental planning policies introduced by state, local and Commonwealth governments to adapt to climate induced impacts on the environment and on community health and well being.

300841.1   Environmental Regulation and Policy

Credit Points 10 **Level** 2

Equivalent Units

300784 - Environmental Regulations and Policy; 300630 - Environmental Regulations

....

This unit aims to provide students with a broad understanding of the current environmental regulations available to environment protection and planning authorities at the State and Local Government level to protect and manage the natural and built environments. This unit will also consider environmental policy introduced by the State and Commonwealth governments to manage land use activities so as to encourage sustainable development practices. It is a suitable unit for students entering government or industry in environmental management, health and planning roles. There is a particular focus on the use of legislation and preparation of policy to address environmental and health risks to the community.

300858.1   Environmental Risk Management

Credit Points 10 **Level** 3

Equivalent Units

300284 - Environment Risk Management; 300532 - Agriculture Risk

Special Requirements

Successful completion of 120 credit points

....

This unit examines the world of environmental risk management and will introduce students to environmental management systems including Environmental Impact Assessment and Environmental Auditing. The unit considers and examines the application of the precautionary principle in real world situations. Students will also be introduced to methods of quantitative risk assessment as applied to environmental and agricultural risks such as urban, peri-urban and rural growth; industrial and agricultural land use; contaminated land, and climate change.

300872.1   Epidemiology

Credit Points 10 **Level** 2

Equivalent Units

300626 - Epidemiology

....

Epidemiology is an analytical science concerned with the distribution and determinants of health-related states in populations, aimed at the management of health problems. Epidemiology is not limited to controlling epidemics but assesses and manages physical, mental and social well-being in living, working and recreational environments. The unit introduces identification and understanding of risk factors for health and disease, and assists the student to develop an investigation protocol for assessing a specific health state within their own field of interest. This addresses career needs for a range of health studies while introducing the epidemiological analytical approach to risk assessment and research.

401121.1   Ergonomics and Work Occupations

Credit Points 10 **Level** 3

Prerequisite

400908.2 People, Environment and Occupations AND **400881.3** Functional Anatomy

Incompatible Units

400926 - Ergonomics and Work Occupations

Special Requirements

Students must be enrolled in 4711 Bachelor of Occupational Therapy or 4712 Bachelor of Occupational Therapy (Honours). This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students.

....

The productivity role is a key aspect of adult life for most people. Occupational therapists play a major role in assisting clients who have had their productivity role affected in some way. This unit explores the importance of productivity for adults, in particular those engaged in paid employment. The focus of this unit is the rehabilitation of the injured worker within the context of the work health and safety legislation and the WorkCover case management system. In addition, this unit will explore vocational counselling and rehabilitation for clients with psychosocial, cognitive and physical disabilities.

300800.2   Essential Chemistry 1

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Chemistry (2 unit) or HSC Multi-strand Science (3 or 4 unit) or equivalent. General Mathematics bands 5 and 6 or Mathematics band 4 or equivalent.

Equivalent Units

300224 - Chemistry 1, 300554 - Principles of Chemistry, 700121 Essential Chemistry 1

....

This unit provides an introduction to some of the essential knowledge, concepts and skills of chemistry, to serve the needs of students majoring in chemistry and those requiring a working knowledge of chemistry. Observable chemical facts and phenomena including structure, dynamics, and energetics, are explained in terms of current mathematical and visual models and further developed in Essential Chemistry 2. Evidence for chemical understanding is provided using IR spectroscopy, mass spectrometry, and computer molecular modelling. Laboratory skills relate theory to practice through the development of practical skills required to determine the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 338

concentration of an analyte using volumetric and spectrophotometric analysis.

700121.3 Essential Chemistry 1 (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Chemistry (2 unit) or HSC Multi-strand Science (3 or 4 unit) or equivalent. General Mathematics bands 5 and 6 or Mathematics band 4 or equivalent. WSTC Prep chemistry.

Equivalent Units

300224 - Chemistry 1, 300800 - Essential Chemistry 1, 300554 - Principles of Chemistry, 700036 - Chemistry 1 (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit provides an introduction to some of the essential knowledge, concepts and skills of chemistry, to serve the needs of students majoring in chemistry and those requiring a working knowledge of chemistry. Observable chemical facts and phenomena including structure, dynamics, and energetics, are explained in terms of current mathematical and visual models and further developed in Essential Chemistry 2. Evidence for chemical understanding is provided using IR spectroscopy, mass spectrometry, and computer molecular modelling. Laboratory skills relate theory to practice through the development of practical skills required to determine the concentration of an analyte using volumetric and spectrophotometric analysis.

300803.1 Essential Chemistry 2

Credit Points 10 **Level** 1

Assumed Knowledge

An understanding and competence with basic chemical principles including SI units, chemical symbols, formulas and equations, nomenclature, stoichiometry, the mole concept, bonding, molecular shape and polarity, states and properties of matter, thermodynamics, equilibria, acids and bases, pH and electrochemistry. General Mathematics bands 5 and 6 or Mathematics band 4 or equivalent

Equivalent Units

300225 - Chemistry 2, 300550 - Medicinal Chemistry

Incompatible Units

CH102A - Biological Chemistry 1.2D

Special Requirements

Students must have safety goggles, cloth laboratory coat and enclosed footwear.

....

This unit introduces an investigation of the reactivity of covalent molecules, in particular, of carbon-based compounds. Focussing on introductory chemical dynamics and thermodynamics, students will develop an in-depth understanding of the structure, nomenclature and reactivity

of the principal organic functional groups, extending their basic principles of chemistry. They will also understand how molecules are synthesised and the ways they react being important in the function and role of chemistry in biological systems in our domestic and industrial worlds.

700122.2 Essential Chemistry 2 (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

An understanding and competence with basic chemical principles including SI units, chemical symbols, formulas and equations, nomenclature, stoichiometry, the mole concept, bonding, molecular shape and polarity, states and properties of matter, thermodynamics, equilibria, acids and bases, pH and electrochemistry. General Mathematics bands 5 and 6 or Mathematics band 4 or equivalent

Equivalent Units

300225 - Chemistry 2, 300550 - Medicinal Chemistry, 700037 - Chemistry 2 (UWSC), 300803 - Essentials of Chemistry 2

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit introduces an investigation of the reactivity of covalent molecules, in particular, of carbon-based compounds. Focussing on introductory chemical dynamics and thermodynamics, students will develop an in-depth understanding of the structure, nomenclature and reactivity of the principal organic functional groups, extending their basic principles of chemistry. They will also understand how molecules are synthesised and the ways they react being important in the function and role of chemistry in biological systems in our domestic and industrial worlds.

200468.2 Estimating 1

Credit Points 10 **Level** 2

....

To provide an understanding of factors that affect the cost of buildings; introduce costing techniques for new and existing buildings and provide students with the skills necessary to prepare builder's estimates.

300726.2 Estimating 2

Credit Points 10 **Level** 4

Assumed Knowledge

Building construction including residential, light industrial and small commercial as covered in the subjects Building 1 and Building 2 and building measurement as covered in Building Quantities and Estimating as covered in Estimating 1.

Equivalent Units

BG412A - Estimating 2

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 339

The aim of this unit is to give students a hands-on experience of the tendering process for construction professionals. Students undertake a team research project to determine the optimum parameters for a civil/building infrastructure estimation.

400249.2   Ethical and Legal Issues in Health Care

Credit Points 10 **Level** 3

....

This unit enables students to explore and develop an understanding of the ethical and legal issues important within contemporary health care. Through the use of case studies students will analyse profound ethical and legal challenges facing current health care that are equally important to health professionals, patients/clients and society generally. Critical thinking about these issues will be encouraged. Students will also be encouraged to consider differing theoretical perspectives in their examination of ethical issues. Additionally, students studying to work within health care, including complementary medicine, will develop a comprehensive understanding of the requirements for ensuring that their practice conforms to legal doctrines and ethical standards.

101623.1   Ethical Futures

Credit Points 10 **Level** 3

Equivalent Units

101119 - Policy, Politics and Educational Futures

....

This unit is designed to build the leadership capacity of educators through exploring, understanding and expressing the values and ethics embedded in policy, practice and educational change. The unit also addresses the importance of ethically informed advocacy and its role in educational futures and democratic processes.

102250.1   Ethical Leadership

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in The Academy at UWS; i.e. students enrolled in Advanced Degrees or other courses at the discretion of the Academy or the Dean.

....

This unit aims to introduce students to major ethical theories, challenges and concepts in a cross disciplinary environment. While many students would have completed a disciplinary-based ethics subject, this unit will bring students from various schools to engage in critical ethical thinking and decision-making. In so doing, students will be required to identify, distinguish and begin to apply ethical frameworks to discuss and reflect on various cross disciplinary challenges from medical experiments to business decision-making, private/public freedoms to development and justice. As such, students will be required to apply ethical concepts to both their personal journeys as both citizen scholars and future professionals.

101466.2   Ethical Traditions in Islam

Credit Points 10 **Level** 3

Prerequisite

101462.2 Understanding Islam and Muslim Societies OR
101464.2 Great Texts of Islam: Qur'an and Hadith

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit introduces students to the rich heritage of ethical traditions in Islamic thought. Students will study and critically evaluate the key features and contributions of Muslim theologians, philosophers and Sufis, who attempted to deal with revelation and rationalistic discourse in exploring the meaning of ethical life for Muslims and discussing whether philosophy and religious wisdoms were equals and allies in the pursuit of happiness. The origin and development of these traditions will be introduced with an emphasis on the relevance and application of some ethical issues, such as free will, predestination, human responsibility, and bioethics, to contemporary Muslim societies.

102381.1   Ethics

Credit Points 10 **Level** 7

....

Since the beginning of philosophy, the question of how to live has taken on an indefinite variety of forms, as befits the variability of its subject matter. This includes the Platonic and Aristotelian conception of the good life, the Kantian categorical imperative, and social ethics. In recent Continental philosophy, this has encompassed the ethics of responsibility, the attempt to investigate the ethics of alterity, interest in the 'care-of-the-self', and the ethics of truth.

101915.1   Ethics and Philosophy

Credit Points 10 **Level** 1

....

This unit introduces students to ethical enquiry - the ways in which we explain what is right and wrong behaviour, perceive good and evil, and try to deal with the different values people hold. Philosophy has long traditions of debating ethical matters, and offers perspectives for trying to answer our ethical questions: this unit introduces the most important and established of those fundamental perspectives, and explains how they arose in their social and historical contexts. The philosophical material will be also be explored through practical examples and questions from contemporary life, in order to enable students to consider ethics today and the sorts of issues they might face.

400975.1   Ethics in Health Research

Credit Points 10 **Level** 7

Special Requirements

Students must be enrolled in a postgraduate course.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 340

....

This unit equips students to explore ethical issues impacting on the conduct of research in the health setting. Students will critically explore ethical issues and their implications in health research, understand the process of gaining Human Research Ethics Approval for research, gain practical experience of developing an ethically sound research plan and application for human ethics approval.

102007.1   Ethics in Historical Perspective

Credit Points 10 **Level** 3

Equivalent Units

100863 - Ethical Cultures

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The unit provides an historical overview of the different types of ethical beliefs and practices that have been used in specific social settings from the classical world to the modern West. It looks at different types of spiritual and secular ethical behaviours, and the doctrines associated with each. It focuses upon the types of ethical argument and judgment-making specific to particular professions, occupations and social statuses over time. It concludes by surveying the different types of ethics taught to professionals today in the West, and on the differences between each, as well as the specific requirements of each. It will be of interest both to students with an interest in the history of ideas, and to students who want to learn more about ethics and moral decision-making.

100897.2   Everyday Life

Credit Points 10 **Level** 1

Equivalent Units

63234 - Introduction to Cultural Studies, 700135 - Everyday Life (UWSC)

....

This unit introduces students to key themes and issues in the study of everyday life. It draws on different disciplinary areas - especially anthropology, sociology and cultural studies - and different theoretical and methodological perspectives to examine the ways cultural practices and meanings are used to shape human identities and societies in everyday life. It will focus on rituals and routines in the different spaces of everyday life, and the ways these contribute to the production of local worlds and the key cultural categories that give meaning to these worlds. It will include a focus on how we research everyday life.

300935.2   Evidence and Crime Scene Management

Credit Points 10 **Level** 2

Equivalent Units

300746 - Evidence and Crime Scene Management

Incompatible Units

300873 - Crime Scene Investigation

Special Requirements

Successful completion of 40 credit points. Students enrolled in 3589 Bachelor of Science (Forensic Science) are not eligible to take this unit as an elective.

....

Evidence and Crime Scene Management is a unit designed to provide students with an understanding and knowledge of critical principles associated with the management of evidence and sites considered as crime scenes. The unit is particularly designed for students wishing to enter professional domains involving; policing, nursing, animal welfare, workplace investigators, health inspectors, WHS officers, fire investigation, council and park rangers, social welfare, environmental protection, fraud and insurance investigation and others where the collection of evidence is a component of professional practice within the discipline. The unit covers topics such as; recognition of various evidence, the recording and documentation of evidence, crime scene or site photography, managing scenes, maintaining evidence integrity, sexual assault evidence, the reporting and presentation of evidence in court and others.

400865.3   Evidence-Based Practice

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge and skills of Foundations of Research & Evidence-based Practice and Research Methods (Qualitative and Quantitative).

Prerequisite

400864.3 Research Methods (Quantitative and Qualitative)

Equivalent Units

400154 - Integrating Evidence into Practice

Special Requirements

Students must be enrolled in Course Codes 4660,4661, 4662, 4663, 4706, 4708, 4710, 4711. Students must have completed 400864 Research Methods PLUS ONE clinical unit from their specific program: Students enrolled in Course Code 4661 or 4708 must have completed 400933 - Podiatry Pre-Clinical; students enrolled in Course Code 4663 or 4711 must have completed 400909 - Occupational Therapy Practice 2; students enrolled in Course Code 4662 or 4706 must have completed 400985 - Physiotherapy Clinical Education A.

....

In this unit, students incorporate previous research and biostatistics knowledge to develop new skills for using evidence to inform all aspects of their professional practice. Evidence-based practice uses an enquiry led approach to manage expanding and uncertain knowledge by formulating answerable questions, effectively searching literature, critically appraising evidence validity and results, and to assess its significance in clinical practice and healthcare decision-making. Students will incorporate evidence in communication and shared decision making processes for patient scenarios relevant to their program.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 341

400944.2 Evidence-Based Practice (Advanced)

Credit Points 10 **Level** 5

Assumed Knowledge

Knowledge and skills of Foundations of Research & Evidence-based Practice 400863 and Research Methods (Qualitative and Quantitative) 400864 AND at least one clinical unit of the student's program.

Prerequisite

400933.2 Podiatry Pre-Clinical OR **400909.3** Occupational Therapy Practice 2 OR **400985.1** Clinical Education A

Incompatible Units

400865 - Evidence-Based Practice

Special Requirements

Students must be eligible to enrol in honours in the nominated courses. The unit is only relevant to honours students in clinical health sciences and is specifically tailored to accommodate the course and progression requirements of such students. It is not appropriate as a general elective.

....

In this unit, students incorporate previous research and biostatistics knowledge to develop new skills for using evidence to inform all aspects of their professional and research practice. Evidence-based practice uses an enquiry led approach to manage expanding and uncertain knowledge by formulating answerable questions, effectively searching literature and critically appraising the validity of evidence to assess its significance in clinical practice and healthcare decision-making. Students will embark on research training through studying the theory and application of research methods to honours research in their chosen field and practising the skills to analyse evidence in the health sciences.

400883.3 Exercise Bioenergetics

Credit Points 10 **Level** 2

Corequisite

401142.1 Exercise Physiology

Equivalent Units

400325 - Bioenergetics of Exercise

Special Requirements

Students must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science).

....

This unit investigates exercise metabolism and related genomics and proteomics in an integrated fashion. Covering: energy pathways; metabolic control; metabolism, oxygen consumption and respiratory quotient relationships; metabolic responses to acute and chronic exercise; pathway contributions to exercise; metabolic limitations to exercise; metabolic contributions to fatigue; metabolic acidosis, cellular and systemic implications of metabolic thresholds, conditions that can alter cellular metabolism. Whilst skeletal muscle metabolism is the primary focus, liver and adipose tissue metabolism are also considered as are anabolic pathways. Students will be exposed to basic biochemical assays of interest to the exercise physiologist.

401145.1 Exercise for Health and Disease Prevention

Credit Points 10 **Level** 3

Prerequisite

401142.1 Exercise Physiology

Equivalent Units

400328 - Exercise Prescription For Special Populations, 400887 - Clinical Exercise Physiology 1

Special Requirements

Must be enrolled in 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

Exercise for Health and Disease Prevention is primarily concerned with teaching students how to design and implement exercise assessments and exercise prescriptions for clinical populations (high-risk). Emphasis is placed on cardiovascular, metabolic, pulmonary and immunological diseases. Unit content relates to how exercise can be applied to prevent, manage and/or treat chronic diseases, informed by an understanding of the pathophysiology and its impact on health status. Students will be involved in designing exercise programs using an evidence-based approach, which will enable a client to achieve optimum results whilst maintaining a high regard for safety, adherence and motivation. Students will be involved in practical sessions aimed at developing the skills necessary for exercise screening, testing and prescription in clinical populations.

401141.1 Exercise Nutrition

Credit Points 10 **Level** 2

Prerequisite

400883.2 Exercise Bioenergetics

Equivalent Units

400884 - Exercise Nutrition, Body Composition and Weight Control

....

This unit provides students with an understanding of the interdependent areas of nutrition within the context of sport, physical activity, and exercise. Nutritional needs and recommendations for all levels and types of physical activity are covered along with the links between nutrition and health, sport performance, body composition and control of body weight. Students will develop skills in nutritional analysis and program development, measurement of energy expenditure and body composition assessment. Students will use these skills and knowledge in the individualisation of advice on exercise nutrition for health and sport performance.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 342

401142.1   Exercise Physiology

Credit Points 10 **Level** 2

Prerequisite

400868.2 Human Anatomy and Physiology 1 AND
400869.3 Human Anatomy and Physiology 2 AND
400880.2 Fundamentals of Exercise Science AND
400881.3 Functional Anatomy

Equivalent Units

400885 - Sport and Exercise Phyiology

....

This unit covers the essential physiology that helps us understand how we control our exercise behaviour. In lectures there is a focus on physiological control, with emphasis on neuromuscular, cardiovascular, respiratory and thermoregulatory responses during exercise, as well as adaptation of these responses in response to ageing, disease and exercise training. In laboratory classes, there is a focus on the acquisition and interpretation of physiological responses during exercise.

401149.1   Exercise Physiology Across the Lifespan

Credit Points 10 **Level** 3

Prerequisite

401142.1 Exercise Physiology

Special Requirements

Must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science). In order to enrol in Second Year Autumn units, all students must have: 1. Working with Children Check Student Declaration 2. National Police Check 3. Adult Vaccination Record Card 4. First Aid Certificate

....

This unit is focused on physiological changes across the human lifespan and their effects on exercise tolerance. There is a particular focus on children and the elderly, and the physiological emphasis is on the control of neuromuscular, cardiovascular, respiratory, thermoregulatory and metabolic function. Exercise and physiological adaptation to exercise training at different ages will also be covered.

401143.1   Exercise Prescription I

Credit Points 10 **Level** 2

Prerequisite

401140.1 Biomechanics AND **401142.1** Exercise Physiology AND **401150.1** Exercise Testing and Measurement

Equivalent Units

400326 - Exercise Prescription for General Populations

Special Requirements

Students must be enrolled in 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

This unit is designed to give students an understanding of and experience in exercise prescription and fitness program construction for the general population (apparently healthy) across all ages and in both genders. It will focus on the development of general health-related exercise programs, which improve aerobic and anaerobic fitness, muscular strength and endurance, flexibility and body composition. Students will design, implement and evaluate a self-prescribed exercise program, and instruct training sessions for fellow students.

401144.1   Exercise Prescription II

Credit Points 10 **Level** 3

Prerequisite

401143.1 Exercise Prescription I

Equivalent Units

400327 - Exercise in Musculoskeletal Injury Rehabilitation, 400902 - Exercise in Musculo-Skeletal Rehabilitation

Special Requirements

Students must be enrolled in 4658 - Bachelor of Health Science (Exercise and Sport Science). In order to enrol in Second Year Autumn units, all students must have: 1. Working with Children Check Student Declaration 2. National Police Check 3. Adult Vaccination Record Card 4. First Aid Certificate

....

This unit focuses on the role of exercise in the functional rehabilitation of musculoskeletal injuries including work and sporting injuries. It covers injury and re-injury prevention strategies; mechanisms of injury; patho-physiology of injury and repair process; design and evaluation of rehabilitation exercise programs; how the exercise program functions in concert with other methods of injury treatment and management; important pharmacological, communication, psychosocial and cultural considerations; the role of the exercise physiologist in the rehabilitation team; the effects of nervous system disorders and injury on skeletal muscle control, injury and rehabilitation are also considered.

400997.3   Exercise Rehabilitation

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of Human anatomy, human physiology, pathophysiology.

Prerequisite

400985.1 Clinical Education A

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4667 Master of Physiotherapy, and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy. Students in 4662 Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy are to complete prerequisite unit 400985 - Clinical Education A. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 343

physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

....

Exercise Rehabilitation focuses on client management with exercise in a variety of settings across the lifespan. This will require effective communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include an understanding of the normal physiological responses to exercise, the implications of pathology and exercise and the integration of exercise based interventions with other physiotherapy modalities.

401150.1 Exercise Testing and Measurement

Credit Points 10 **Level** 2

Prerequisite

400880.2 Fundamentals of Exercise Science AND **400881.3** Functional Anatomy AND **400868.2** Human Anatomy and Physiology 1 AND **400869.3** Human Anatomy and Physiology 2

Special Requirements

Students must be enrolled in 4658 - Bachelor of Health Science (Sport and Exercise Science). In order to enrol in Second Year Autumn units, all students must have: 1. Working with Children Check Student Declaration 2. National Police Check 3. Adult Vaccination Record Card 4. First Aid Certificate

....

This unit provides students with an understanding of the safety, ethical, logistical and theoretical considerations for administering tests and conducting measurements within the Exercise Science scope of practice. Students will develop skills in data analysis, data visualisation and generating reports to hypothetical clients within the Sport and Exercise sector. The unit introduces numerous physical and physiological tests, together with performance analysis and monitoring techniques, with a particular focus on the measurement accuracy of data collected. Students will evaluate and interpret data from tests to inform further practice in exercise prescription and exercise recommendations.

102206.1 Experience-based Outdoor Education

Credit Points 10 **Level** 1

....

In this unit students to connect with the natural world through engaging in outdoor adventure activities. Students learn how to understand themselves better and develop positive relationships with others and the environment. The unit focuses on self-reliance, resiliency, interdependence, managing personal risks, and the value of life-long outdoor recreation for enjoyment, health and well-being. This unit will involve two full-day practical field trips in the outdoors as well as lectures and tutorials. The practical field trips extend students physically, mentally and socially and require a moderate level of personal fitness.

101874.3 Experiential Learning in Communities (ELC)

Credit Points 10 **Level** 2

....

Experiential Learning in Communities (ELC) is a unit in which students come to understand the value of service learning within the university student community as part of the Equity Buddies Support Network. As this unit explores a service learning approach to teaching and learning it includes a participation component which comprises a combination of lectures, tutorials, debriefing group meetings and peer mentoring partnerships. Enrolment in ELC is open to first, second and third year students. Students will develop skills in pedagogy and practice within the unit through supporting fellow students' learning experiences and transition to university. The unit develops students' understandings about communities of practice, peer learning, interpersonal and intercultural communication, meta-cognition, reflection and the reflection process, and academic literacy.

100013.3 Experimental Design and Analysis

Credit Points 10 **Level** 2

Prerequisite

101183.2 Psychology: Behavioural Science

Special Requirements

The online version of this unit is only available to students enrolled in 1793 - Bachelor of Science, Criminology and Psychological Studies. Pre-requisites will not apply to students enrolled in courses 1630 Graduate Diploma in Psychological Studies and 1501/1502/1796 Graduate Diploma in Psychology. Enrolment in these awards requires graduate status; hence the students have demonstrated proficiency in tertiary studies. Each applicant in these awards is assessed individually and provided with an individual study sequence by the Course Advisor.

....

This unit is driven by the scientific method with a focus on experimental design and related data analysis. Although some of the methods and techniques are dealt with in passing in earlier units, a more complete approach is adopted here. Research design and methodology issues, statistical concepts and techniques, computer analysis of data, and communicating research findings are all features of this unit.

401162.1 Experimental Design and Analysis (PG)

Credit Points 10 **Level** 7

Assumed Knowledge

Students are to have successfully completed an undergraduate degree in a related discipline

Special Requirements

The supervisor must be research active and have sufficient funding and resources for this project and students are expected to supply protective clothing appropriate for laboratory and/or fieldwork studies.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 344

....

This elective unit will develop research competencies for students in health, medical, biomedical and natural sciences, enabling these students to enhance their understanding of research by attaining specific research goal/s that will contribute to the completion of a confirmation of candidature (COC) as part of the Masters of Research. In consultation with their supervisory panel, students will be expected to design and execute a small or pilot research project and to then analyse and present results obtained in this project. The skills acquired in Experimental Design and Analysis will provide a firm foundation in the experimental and research methods required by the student for their research project in the second year of the Masters of Research. The skills acquired in this unit will be enhanced in the unit Advanced Research Skills.

300879.1   Experimental Foods

Credit Points 10 **Level** 3

Prerequisite

300805.1 Food Science 1 AND **300842.1** Food Science 2

Equivalent Units

300638 - Experimental Foods

Special Requirements

Students are required to have Personal Protection Equipment e.g. apron and closed-in shoes.

....

This unit aims to build on students' knowledge of food preparation gained in Food Science 1 and 2, the focus of this unit includes; food science and principles, the interaction of ingredients and the added effects of physical procedures on the end product. Students develop advanced scientific methodologies to give reproducibility. This is a recommended unit for those intending to advance in the areas of recipe development and new product development.

100584.2   Experimental Writing and Electronic Publication

Credit Points 10 **Level** 2

....

Experimental Writing and Electronic Publication is a practical and experiential exploration of modernist writing practices. Students will be introduced to a range of innovative writing techniques designed to stimulate creative thinking and assist in the development of a regular writing practice. Areas of study include: exploration of pre-writing processes; experimental writing genres; power of language; evaluative process; and the development of individual and collaborative techniques for planning and executing writing projects. A primary component of this unit includes working on writing exercises both at home and in class. These exercises will be used to develop the end-of-unit major project.

100254.3   Exploring Local History

Credit Points 10 **Level** 3

Equivalent Units

63153 - Exploring the History of Western Sydney

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Understanding local history is an integral part of establishing personal and community identities. Local studies are used as the foundation for many socio-economic studies across various disciplines as well as in school curricula. The University of Western Sydney is part of a region rich in history, little of which has been researched or published. Local history techniques involve understanding a variety of physical and documentary sources. Students learn the history of the Sydney region by assembling data from original historical sources, based at the Archives in Kingswood and Villawood and from on-line data repositories. There are opportunities for site visits to historical and archaeological sites and local museums.

200589.2   Export Strategy and Applications

Credit Points 10 **Level** 3

Assumed Knowledge

Principles of international business including the dynamics of foreign business markets, international marketing and research methods, comparative global economics, international corporate finance and strategy. The basics of economics, accounting, law, statistics and business communications are also assumed.

Prerequisite

200591.2 Introduction to International Business

Equivalent Units

61126 - International Business Project 2

....

Internationalisation has become a strategic necessity for many firms wishing to survive and grow in today's increasingly competitive domestic economy. Globalisation in its many forms is a powerful driver of change. 'Export Strategy & Applications' will give students the practical skills needed to manage the day to day international trading activities of any company. This unit examines how and why exporting firms select and plan their entry into foreign markets, the management of intermediaries in the distribution channel, ways of promoting goods and services overseas, and the methods of trade finance, insurance and logistics that companies use on a daily basis as they pursue success internationally. This unit provides students with those essential skills sought by any employer company operating in international markets.

300804.1   Feeding the Planet

Credit Points 10 **Level** 1

Equivalent Units

300502 - Primary Production

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 345

Units

....

Global population is forecast to reach 9 billion by 2050. To meet future demand for food we will need to supply 70% more food than we currently produce. At the same time, the resources that underpin food production; land, water, energy and people; are either in decline or becoming more expensive. One of the greatest challenges facing humanity over the next few decades is how to feed 9 billion without causing unsustainable damage to our natural resource base? In 'Feeding the Planet' we will explore this challenge from a range of perspectives. This unit overviews global population, food requirements and food security issues of feeding the world's growing population. It involves the understanding, knowledge and practical hands-on experience of primary production industries and related enterprises. Ethical issues relating to primary production, food and diets and the many constraints for food production and sustainable intensification of production with limited resources will be investigated.

101844.2   Feminist Theories

Credit Points 10 **Level** 3

Special Requirements
Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines a variety of theoretical perspectives that inform feminist thought and practice. We will discuss diverse feminist analyses of gender relations and formations of power, intersections of gender with race, class, and culture, and possibilities for feminist solidarity in a global context.

300913.1   Field Project 1

Credit Points 10 **Level** 3

Prerequisite
300662.1 Research Methods OR **300932.1** Natural Science Research Methods

Equivalent Units
300659 - Field Project 1

Special Requirements
Students enrolling externally must be externally enrolled in 3672 Bachelor of Natural Science (Environment and Health). All other students enrolling externally will need Unit Coordinator approval to do so. Students will need to complete a Risk Assessment form to approval of their supervisor before commencing field work for this unit. Animal and/or Human Ethics approvals may be needed before field data collection commences for some projects. Students requiring ACEC approval will need to submit these through their supervisor and the Unit Coordinator. Full ACEC approval applications need the signature of an appropriately qualified staff academic (agreeing to be the principal supervisor) before these can be submitted. Students involving research on Human participants will need Human Ethics approval from their supervisor and the Unit Coordinator before commencing field data collection. This may be given in two stages: for pilot studies and subsequently for main field studies revised in light of the pilot. Other approvals (e.g. NPWS) may be needed for

specific projects. A report detailing the outcomes and any changes to approved protocols will be required in the Spring Unit 300914 Field Project 2 for all studies where Ethics approvals have been granted.

....

Unit 300913 (Field Project 1) and the associated unit 300914 (Field Project 2) are designed as 'capstone' units of study for the Bachelor of Natural Science degree. They draw together the skills acquired in previous years of the degree course and apply them in the context of a year-long research project exploring a real world problem on behalf of an industry, government or community agency client. Over the year, the student will develop skills in scoping, planning, implementing, reporting on the research project; reflecting on what has been learned in the context of their personal and professional development and how this can be used in future career planning. In this Field Project 1 unit the focus is on developing skills in designing an appropriate research project in collaboration with the industry client, contextualising the problem and appropriate research methods in the academic literature, developing and implementing a pilot study to test the proposed research methods, and planning ahead for collecting, organising ad analysing field data and reporting the results to the client in the second unit - Field Project 2.

300914.1   Field Project 2

Credit Points 10 **Level** 3

Prerequisite
300913.1 Field Project 1

Equivalent Units
300660 - Field Project 2

Special Requirements
Students enrolling externally must be externally enrolled in Bachelor of Natural Science (Environment and Health). All other students enrolling externally will need Unit Coordinator approval. Students who completed Field Project 1 Unit in a previous year (i.e. are not continuing directly into this unit) will need to demonstrate that they have the data from this earlier Unit that can be used to produce an analysis and a report for their original client. Students need to advise the Unit Coordinator of any changes to the Risk Assessment submitted for unit 300913 Field Project 1. Animal and Human Ethics reports will be required as part of this Unit where approvals were obtained for these in Unit 300913 Field Project 1. Other reports (e.g. NPWS) may be needed for specific projects

....

This is the second of two units (Field Project 1 & Field Project 2) that are designed as 'capstone' units of study for the Bachelor of Natural Science degree. They draw together the skills acquired in previous years of the degree course and apply them in the context of a year-long research project exploring a real world problem on behalf of a client in industry, government or community agency. In the first unit the student will have developed skills in scoping, planning, and piloting methods for a research project. In this second Field Project unit the student will collect and organise a significant body of relevant field data, analyse this and present the conclusions and recommendations in the form of a report to the client that

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 346

provides the student's answers to the client's initial problems. The student then undertakes a critical review of the whole process to identify lessons for both personal and professional development and future career planning.

100256.4 Film and Affect

Credit Points 10 **Level** 3

Equivalent Units

63062 - Film, Genre and Affect

Special Requirements

Successful completion of 60 credit points

....

The concept of affect refers to intense feeling or emotion, and this unit examines different ways that affect has been understood in cinema. The unit explores the way that diverse cinematic genres have developed very different strategies to engage the spectator in this intense way, and discusses conventions, such as techniques of narrative, cinematography and performance. The unit examines models of affect derived from early film, the transformation of these models with the development of narrative, and the evolution of affective strategies in contemporary cinema. Examples may be drawn from early cinema, experimental cinema, political cinema, documentary or mainstream genres such as melodrama or horror. Through an analysis of the strategies used in various genres, we will raise broader questions about the nature of spectatorship in different historical and cultural contexts.

100866.3 Film and Drama

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit offers a survey of one or more of the following: drama, drama on film and film drama. It will examine key concepts in cinema theory, dramatic form and film production. Comparison may be made between theatre texts and film adaptations related to the work of specific dramatists; or drama texts may be considered in themselves (often with the screening of filmed versions of these dramas). Alternatively, film itself will be considered as a disinct dramatic form whose contours will be traced in relation to the work of important directors. Viewing films will form an integral part of this unit and students will be expected to attend screenings of films as well as a lecture and tutorial.

200111.2 Financial Accounting Applications

Credit Points 10 **Level** 1

Prerequisite

200101.3 Accounting Information for Managers OR **200103.1** Accounting Reports and Decisions

Equivalent Units

AC105A - Finance and Accounting, AC103A - Introductory Financial Accounting, H2818 - Financial and Management Accounting II, 61111 - Introductory Financial Accounting

....

This unit gives students the practical skills necessary to analyse the accounting transactions of an entity and then be able to measure and record these transactions in a systematic manner for the preparation of accounting reports to external users.

200048.2 Financial Institutions and Markets

Credit Points 10 **Level** 1

....

The investment, financing and risk management decisions made by individuals, firms and governments are implemented by creating and trading financial instruments in financial markets, often with the involvement of a variety of institutions. Using the Australian financial system as an illustration, Financial Institutions and Markets introduces students to the theory and functions of financial institutions and markets. Students develop an understanding of the role and functions of bank and non-bank financial institutions and of markets in equities, debt, foreign exchange and derivatives.

101315.3 Financing Cities in the Global Economy

Credit Points 10 **Level** 7

Special Requirements

Students must be enrolled in a postgraduate course.

....

Financing infrastructure to keep cities running and growing at a time when governments face new financial constraints is a key challenge for urban managers. In order to be able to contribute to the debate about financing cities it is important for future urban managers to develop a basic financial literacy, understand and draw on the options for financing essential urban functions in Australia cities and elsewhere, and assess the tensions involved in public and private financing pathways. This unit addresses these needs through both theoretical and practical approaches to the city as a set of flows within a wider urban network of relations. Students develop their understanding via interactive lectures, case studies, fieldwork exercises and assignments.

200910.1 Financing Enterprises

Credit Points 10 **Level** 1

....

Financing Enterprises focuses on key financial information in the macroeconomic environment. This unit is a core unit in the Bachelor of Business but is also open to participants with an interest in understanding the importance of finance issues in a global enterprise context. The unit utilises problem solving, case studies and peer discussion so that participants can understand the real world significance of financial issues and enterprise futures. Successful completion of the unit equips participants to demonstrate an appreciation of the key concepts involved in financing enterprises.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 347

300762.2 Fluid Mechanics

Credit Points 10 **Level** 2

Assumed Knowledge

200238 - Mathematics for Engineers 2

Prerequisite

200237.3 Mathematics for Engineers 1 AND **300963.1** Engineering Physics OR **300464.2** Physics and Materials

Equivalent Units

300740 -Water Engineering, 700111 - Fluid Mechanics (UWSC Assoc Deg)

....

This unit provides a basic understanding of fluid mechanics principles. While the main focus will remain on incompressible fluids, effects of compressible fluids will also be discussed. The theories learned in classes will be reinforced in laboratory sessions.

300915.1 Food Product Development

Credit Points 10 **Level** 3

Assumed Knowledge

Students enrolled in this unit must have previous knowledge of food science principles, food processing, human nutrition, food analysis, sensory evaluation and food quality control systems, plus experience in food formulation and ingredient manipulation coupled with an understanding of nutritional requirements.

Prerequisite

300922.1 Quality Assurance and Food Analysis AND **300879.1** Experimental Foods

Equivalent Units

300637 - Food Product Development Practicum, FS304A - Food Product Development Practicum

Special Requirements

Successful completion of 160 credit points

....

This unit is a final year capstone unit where students work in a team environment to apply the knowledge previously gained through their studies in nutrition and food science to develop a novel food product. The entire process of product development will be covered, including: idea generation; collating market, technical and consumer information; consumer surveying to establish the need/desire for a new product; product innovation development; quality testing and packaging. Students will develop specialised knowledge of the total product development system, including the ability to design, develop formulations and evaluation of sensory properties. Final product assessment includes nutritional composition, microbiological analysis, sensory evaluation and labelling compliant with regulations. The project is run in the simulated industry environment; team work among the members plays a key part of the unit.

300859.1 Food Safety

Credit Points 10 **Level** 3

Prerequisite

300844.1 General Microbiology OR **300833.1** Microbiology 1

Equivalent Units

300639 - Food Safety

Special Requirements

Successful completion of 120 credit points

....

Food safety is rapidly evolving with the emergence of new foodborne diseases, changing disease patterns, evolving approaches to risk analysis and an emerging requirement that food producers, processors, handlers and consumers take shared responsibility for food safety. This unit aims to equip students with the necessary skills to identify, evaluate and control foodborne hazards in order to protect the safety and quality of the food supply and reduce associated risks to human health. Content includes the key elements of food safety and regulation, food contamination, food spoilage agents, foodborne hazards, principles of good hygienic practice and preservation in food production, preparation and distribution.

300805.1 Food Science 1

Credit Points 10 **Level** 1

Equivalent Units

300498 - Food Science 1, FS108A - Food Science & Technology Practicum 1.1

Special Requirements

Students must have enclosed footwear and lab coats.

....

Food provides the sustenance of life with many roles, nutrition for good health, enjoyment and cultural identity. This unit introduces the basic principles for the understanding of food. Students will gain an awareness of the history and cultural significance of food and its traditions in Australia and around the world and the science behind food, its composition, physical and functional characteristics. Fruits and vegetables, cereal, meat and dairy products will be covered, how they are processed and impacts on food quality and nutrition. Current issues will be discussed, such as world food supply, food-borne disease, diet and healt, obesity and new trends in food.

300842.2 Food Science 2

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of first year chemistry and biology; understanding of food composition.

Prerequisite

300805.1 Food Science 1

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 348

Equivalent Units

FS109A - Food Science & Technology Practicum 1.2;
300499 - Food Science 2

Special Requirements

Students are required to have Personal Protection Equipment for attendance at practical, ie. Laboratory coat, safety goggles, enclosed shoes.

....

This unit introduces students to the principles of food preservation, including heat treatments, chilling, freezing, dehydration, pickles and fermentation. Factors affecting food quality are explored with respect to microbial, chemical and physical changes in food and their effects on food safety, nutritional value and sensory characteristics. The basic principles of good manufacturing practises, sanitation and Hazard Analysis Critical Control Point (HACCP) for control of food safety will be studied in relation to the design of safe food manufacturing processes. The application of the food preservation principles to the processing of food products is covered through hands-on practicals in the pilot plant.

102305.1   Food: Its History and Sustainability

Credit Points 10 **Level** 3

Special Requirements

Completion of 60 credit points of study.

....

The modern world seems obsessed by food. This unit will look at the historical development of sources of food, from archaeological evidence of the earliest human meals through the emergence of agriculture and its scientific modifications to the technological changes in the methods of preservation, preparation, cooking and eating various foods. Food is also integral to our social and cultural lives and the unit will investigate the historical origins of some of these customs. It will be taught in intensive mode at UWS's own historical agricultural site - UWS Hawkesbury. From on-site investigation of Australian colonial food production and cooking, students will have the opportunity to range across time and place to explore foods that are part of their cultural heritage - or feasts that they wish they could have eaten from centuries long past.

300843.1   Forensic and Environmental Analysis

Credit Points 10 **Level** 2

Assumed Knowledge

An understanding and competence with basic chemical principles including SI units, chemical symbols, formulas and equations, stoichiometry, the mole concept, equilibria, acids and bases, pH and electrochemistry. Introductory statistics – mean, standard deviation, distributions, linear regression

Prerequisite

300800.1 Essential Chemistry 1 OR **300808.1** Introductory Chemistry

Equivalent Units

300493 - Forensic and Environmental Analysis

....

This unit extends the student's knowledge and experience of analytical techniques by applying them to forensic investigations and analysis in the environmental and food sciences. It will provide an understanding of the chemical and physical principles underlying the use of instrumentation in chemical analysis. Topics include principles of spectroscopic techniques, separation methods; sample collection and storage; presumptive testing; modern chemical instrumentation for gas and liquid chromatography; atomic spectroscopy; mass spectroscopy; x-ray methods and spectroscopic methods.

301120.1   Forensic Anthropology

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of the general aspects of contemporaneous note taking, crime scene documentation and crime scene photography.

Prerequisite

300874.1 Digital Forensic Photography AND **300873.2** Crime Scene Investigation

Equivalent Units

300378 - Forensic Archaeology, 300882 - Forensic Archaeology

Special Requirements

Students must have completed 60 credit points at Level 1 and 40 credit points at Level 2.

....

The objectives of this unit are to gain an understanding of the changes to the human body from death to discovery and how we can use the biological variability of humans to assist in the identification of human remains. Students will learn the fundamentals of detection, excavation and identification of human and non-human remains and learn how to prepare their findings for court. Students will be required to apply the knowledge gained during lectures to a practical based excavation, analysis and preparation of a case file.

401170.1   Forensic Biology

Credit Points 10 **Level** 3

Prerequisite

300817.1 Molecular Biology AND **300845.1** Genetics

Equivalent Units

300377 - Forensic Analysis of Physical Evidence, 300918 - Invertebrate Biology

Special Requirements

Students must have Safety glasses and laboratory coat, laboratory book and enclosed footwear

....

This subject covers the work performed by a forensic biologist, from the initial collection of biological evidence (including blood, semen and saliva), through to presumptive and confirmatory testing, and the application of DNA profiling methods. There is a focus on the

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 349

application of advanced molecular biology techniques, including DNA extraction, purification, amplification and analysis. Population genetics and population structure are addressed in relation to the interpretation and relevance of the results. Quality assurance requirements are considered, together with the statistical analysis of DNA profiling results and the presentation of biological evidence in court.

300868.1   Forensic Chemistry

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of general and analytical chemistry equivalent to satisfactory completion of Chemistry 1, Chemistry 2, Essentials of Chemistry 1, Essentials of Chemistry 2 and a second year analytical chemistry unit.

Prerequisite

300297.2 Analytical Chemistry 2 OR **300843.1** Forensic and Environmental Analysis

Equivalent Units

300494 - Forensic Chemsitry

Special Requirements

Students must have safety glasses and laboratory coat.

....

This unit extends the student's knowledge and understanding of chemical topics that are relevant to forensic investigations, and provides a deeper understanding of the underlying chemical and physical principles. Topics are taught in the context of the correct principles and procedures for collecting and conserving evidence, and the safe handling of chemical substances. Topics include an extended range of modern chemical instrumentation; the chemistry and analysis of various classes of drugs; clandestine drug laboratories; fire, arson and accelerants; explosions and explosives; and various forms of trace evidence (including textile fibres, glass and paint).

300806.1   Forensic Science

Credit Points 10 **Level** 1

Assumed Knowledge

Basic academic skills, including the ability to write essays in English at a level appropriate to a first-year undergraduate student.

Equivalent Units

300654 - Forensic Science, SC103A - Forensic Science

....

This unit aims to give students a basic understanding of scientific methodology as it applies to the collection, analysis and interpretation of forensic evidence. Students are introduced to a range of crime scene investigation methods and analysis methods that are used with various types of forensic evidence. The concept of individualisation is introduced and the importance of this concept in forensic science is explained. Case studies are used to explain the concepts discussed in this unit. The role of human factors is discussed, together with the importance of critically evaluating forensic evidence and the means by which it was obtained.

300404.2   Formal Software Engineering

Credit Points 10 **Level** 3

Prerequisite

200025.2 Discrete Mathematics AND **300103.2** Data Structures and Algorithms

....

This unit is concerned with the design, development and maintenance of computer software systems. The unit focuses on current formal specification and system verification technologies and methodologies. Foundations of model checking such as LTL and CTL, as well as a particular practical model checker SPIN will be thoroughly studied in this unit. The SPIN model checker with programming language PROMELA will be used for all software development and verification practices throughout this unit.

700144.2   Foundation Physics 1 (WSTC Prep)

Credit Points 10 **Level** Z

Assumed Knowledge

Year 10 Mathematics and Science or equivalent

Equivalent Units

900079 - Foundation Physics 1 (UWSC)

Incompatible Units

700026 - Physics (UWSCFS); 900036 - Physics (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit replaces 700026 - Physics (UWSCFS) from Term 1 2014. This unit provides a brief introduction to the essentials of Physics. This unit is focused on skills and knowledge that students from a variety of science, construction and engineering courses need in their first year of study. Students cover introductory topics in Mechanics, Energy and Power, Electricity and waves.

700145.2   Foundation Physics 2 (WSTC Prep)

Credit Points 10 **Level** Z

Assumed Knowledge

Year 10 Mathematics and Science or equivalent

Equivalent Units

900080 - Foundation Physics 2 (UWSC)

Incompatible Units

900068 - Physics (UWSC), 700026 - Physics (UWSCFS)

Special Requirements

Students must be enrolled at UWSCollege to enrol in this unit. Pre-requisites: Students enrolled in 7066 Diploma in Engineering Extended or 7082 Bachelor of Engineering Extended must pass 700144 Foundation Physics before enrolling in this unit.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 350

This units replaces 700026 - Physics (UWSCFS) from Term 1 2014. This unit provides students with the background knowledge and skills in physics needed for Engineering courses. Students will cover more advanced content in Mechanics, Electricity, Magnetism and waves.

401029.1 Foundations for Nursing Practice

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4692 Bachelor of Nursing Graduate Entry. Students must hold: 1). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer for some placements within The Justice Health & Forensic Mental Health Network. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number, ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number, iii. Submit the letter with a valid Working with Children Check number to the School of Nursing and Midwifery to facilitate processing of a school placement if requested; 2). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3). Adult Health Immunisation Schedule; 4). Code of Conduct Agreement; 5). First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit is conducted in an intensive compressed study mode and prepares students with a previous degree or approved overseas registered nurses to engage in an accelerated program of study by providing foundational / core learning activities to support their transition into second year units of the main Bachelor Nursing program.

400861.2 Foundations of Medicine 1

Credit Points 80 **Level** 1

Equivalent Units

400737 - Scientific Basis of Medicine 1, 400738 - Health Practice 1

Special Requirements

Students must be enrolled in 4671, 4641, 4647. Students are required to have obtained all the necessary documentation to be verified by NSW ClinConnect. This verification is a requirement of NSW Health for all students enrolled in medical programs. If a student fails to produce this documentation to ClinConnect they will be unable to attend their hospital tutorials and placements. Attendance at the hospital is a mandatory requirement of the Unit and failure to attend will result in a 'CF' (Compulsory Fail) of the unit. The documents that are to be provided to ClinConnect are: 1. National Police Certificate 2. Adult Health Immunization Schedule 3. Code of Conduct Agreement Students are also expected to meet the inherent requirements of the course as outlined in the University of Western Sydney Inherent Requirements for Medicine Courses: (www.uws.edu.au/ir/inherent_requirements/

inherent_requirements_for_medicine_courses). Inherent requirements are the fundamental components of a Course or Unit, that are necessary to demonstrate the capabilities, knowledge and skills essential to achieve the core learning outcomes of the Course or Unit, while preserving the academic integrity of the university's learning assessment and accreditation processes. The Disability Education Standard, Section 3.4 (3) states: "In assessing whether an adjustment to the Course, Unit of the Course or program in which the student is enrolled, or proposes to be enrolled, is reasonable, the provider is entitled to maintain the academic requirements of the Course or program, and other requirements or components that are inherent in or essential to its nature. Note: In providing for students with disabilities, a provider may continue to ensure the integrity of its Courses or programs and assessment requirements and processes, so that those on whom it confers an award can present themselves as having the appropriate knowledge, experience and expertise implicit in the holding of that particular award." Students must have 1. Stethoscope 2. Pencil torch 3. White laboratory coat 4. Watch (with a second hand or display) in order to complete this unit.

....

This unit integrates the foundational sciences with clinical skills. Students learn the structure and function of the human body, particularly, whole body organisation, basic anatomy, nutrition and metabolism, function and pathology of the gastrointestinal system (including liver), cardiovascular system and respiratory system. In addition, students will gain an understanding of health psychology, patient experience, the medical system, identifying risk, errors in medical practice, managing error and basic procedures such as hand washing. A particular focus will be the communities that make up Greater Western Sydney. Students will also participate in clinical tutorials and will gain skills in history taking and communication in Session 1H and skills in history and examination of the gastrointestinal tract, cardiovascular system and respiratory systems during Session 2H.

400862.2 Foundations of Medicine 2

Credit Points 80 **Level** 2

Prerequisite

400861.2 Foundations of Medicine 1

Equivalent Units

400739 - Scientific Basis of Medicine 2, 400740 - Health Practice 2

Special Requirements

Students must be enrolled in 4671, 4641, 4647. Students are required to have obtained all the necessary documentation to be verified by NSW ClinConnect. This verification is a requirement of NSW Health for all students enrolled in medical programs. If a student fails to produce this documentation to ClinConnect they will be unable to attend their hospital tutorials and placements. Attendance at the hospital is a mandatory requirement of the Unit and failure to attend will result in a 'CF' (Compulsory Fail) of the unit. The documents that are to be provided to ClinConnect are: 1. National Police Certificate 2. Adult Health Immunization Schedule 3. Code of Conduct Agreement Students are also expected to meet the inherent

Units

requirements of the course as outlined in the University of Western Sydney Inherent Requirements for Medicine Courses: (www.uws.edu.au/ir/inherent_requirements/ inherent_requirements_for_medicine_courses). Inherent requirements are the fundamental components of a Course or Unit, that are necessary to demonstrate the capabilities, knowledge and skills essential to achieve the core learning outcomes of the Course or Unit, while preserving the academic integrity of the university's learning assessment and accreditation processes. The Disability Education Standard, Section 3.4 (3) states: "In assessing whether an adjustment to the Course, Unit of the Course or program in which the student is enrolled, or proposes to be enrolled, is reasonable, the provider is entitled to maintain the academic requirements of the Course or program, and other requirements or components that are inherent in or essential to its nature. Note: In providing for students with disabilities, a provider may continue to ensure the integrity of its Courses or programs and assessment requirements and processes, so that those on whom it confers an award can present themselves as having the appropriate knowledge, experience and expertise implicit in the holding of that particular award." Students must have 1. Stethoscope 2. Pencil torch 3. White laboratory coat 4. Watch (with a second hand or display) 5. Closed in shoes in order to complete this unit

....

This unit integrates the foundational sciences with clinical skills. Students continue to build their knowledge of the structure and function of the human body, particularly: renal, musculoskeletal, neuroscience, reproduction and development, endocrinology, infectious disease, immunology and cancer. In addition, students will gain an understanding of health psychology, patient experience, the medical system, identifying risk, errors in medical practice, managing error and basic procedures such as hand washing. A particular focus will be the communities that make up Greater Western Sydney. On clinical days, students will participate in clinical tutorials to further develop their skills in history and examination of body systems and will also learn how to carry out basic clinical procedures.

400863.2 Foundations of Research and Evidence-Based Practice

Credit Points 10 **Level** 1

Equivalent Units

700064 - Foundations of Research and Evidence-Based Practice (UWSC)

....

NOTE: The ONLINE offering is currently only available to students in the Public Health Key program. This unit will consider the reasons and roles of evidence-based practice and research, and introduce students to their language and core concepts. Skills will be developed for asking clinical or professional healthcare questions and to translate these into search strategies for finding evidence. To make sense of that evidence, students will be introduced to quantitative and qualitative research methods, types of data, how data is described and how biostatistics is used to provide meaning to research data.

700064.2 Foundations of Research and Evidence-Based Practice (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

400863 - Foundations of Research and Evidence-Based Practice

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit will consider the reasons and roles of evidence-based practice and research, and introduce students to their language and core concepts. Skills will be developed for asking clinical or professional healthcare questions and to translate these into search strategies for finding evidence. To make sense of that evidence, students will be introduced to quantitative and qualitative research methods, types of data, how data is described and how biostatistics is used to provide meaning to research data.

400962.2 Foundations of Wellbeing

Credit Points 10 **Level** 1

Equivalent Units

100663 - Foundations of Wellbeing

....

This unit provides an introduction to wellbeing through a reflective and strengths–based approach that seeks to enhance personal, social and community wellbeing. Students will be able to understand, analyse and synthesize personal and structural factors that influence wellbeing. When considering how these factors and how issues of social justice and equity have differential impacts on both individuals and communities, students will be able to develop relevant strategies for taking personal and social action to enhance wellbeing.

101755.1 From Ochre to Acrylics to New Technologies

Credit Points 10 **Level** 2

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all Undergraduate students who have open electives. This unit examines the emergence of the Indigenous Australian visual arts movement. It will provide students with a body of knowledge which explores the transition of art-making as it emerged from an historical cultural practice: from ochre to acrylics to new technologies. In examining the Indigenous visual arts movement beginning with the Papunya Tula artists, students will gain an insight into the significant contribution urban and regional Indigenous artists make to the Australian economy and culture. Students will have the exciting opportunity to

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 352

participate in site visits and engage with a number of Indigenous visual artists.

400881.3 Functional Anatomy

Credit Points 10 **Level** 1

Prerequisite

400868.2 Human Anatomy and Physiology 1

Equivalent Units

400134 - Human Medical Sciences 3

Incompatible Units

300319 - Introduction to Human Anatomy and Histology, 300320 - Introduction to Human Physiology, 400256 - Human Medical Sciences 2, 300755 - The Appendicular Skeleton

Special Requirements

Students must be enrolled in Sport and Exercise Science, Physiotherapy, Occupational Therapy or Podiatry due to limited Wet Anatomy laboratory space.

....

This unit covers in depth the functional anatomy of the musculoskeletal system. Special attention is given to the relationship between form and function, the terminology used to describe human movement and thorough knowledge of the bony landmarks, joints, muscle attachments, innervation, blood supply along with detailed actions of specific muscles and muscle groups. Emphasis is on a practical functional context with the relevance to clinical applications such as surface and imaging anatomy, and the anatomical basis of common injuries. Learning experience intends to stimulate proactive deep approach in learning anatomy motivated by the outcomes driven from specialist work within the Health professions.

300936.1 Functional Proteins and Genes

Credit Points 10 **Level** 2

Prerequisite

300816.1 Cell Biology AND **300803.1** Essential Chemistry 2

Equivalent Units

300219 - Biochemistry 1, 300555 - Proteins and Genes

Special Requirements

Student must have closed-in shoes, lab coat, safety glasses and laboratory note book.

....

Biochemistry is the study of the chemistry of life. By understanding the structure and roles of biological macromolecules found in cells students will develop the concept of self assembly of these molecules to form life. Topics include the structure of carbohydrates, lipids, proteins, and nucleic acids and how they function in the lipid and aqueous environments of the cell. Basic metabolism is introduced with an overview of the major pathways in cells, mechanisms of regulation, and an introduction into important cofactors and intermediatory molecules. These concepts will be reinforced through practical classes that teach critical skills in experimental design, analysis and interpretation.

400880.2 Fundamentals of Exercise Science

Credit Points 10 **Level** 1

Equivalent Units

400802 - Professional Practice of Sport Exercise Science, 700073 - Fundamentals of Exercise Science (UWSC)

Special Requirements

Students must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science) or 4659 Bachelor of Health Science (Personal Development, Health and Physical Education.

....

This unit is designed to provide fundamental basic science and sport and exercise science content, with the intent to prepare the students for the more advanced scientific applications to the study and research of the sport and exercise sciences. Students will be exposed to computer software applications to aid data processing used in the sport and exercise sciences, with special applications to fields such as biomechanics, exercise physiology, motor learning, skill acquisition and sport psychology.

700073.2 Fundamentals of Exercise Science (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

400880 - Fundamentals of Exercise Science

Special Requirements

Students must be enrolled in the Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit is designed to provide fundamental basic science and sport and exercise science content, with the intent to prepare the students for the more advanced scientific applications to the study and research of the sport and exercise sciences. Students will be exposed to computer software applications to aid data processing used in the sport and exercise sciences, with special applications to fields such as biomechanics, exercise physiology, motor learning, skill acquisition and sport psychology.

700190.2 Fundamentals of Health Science (WSTC Prep)

Credit Points 10 **Level** Z

Equivalent Units

900090 - Science for Health Professionals (UWSC), 700059 - Science for Health Science (UWSCFS)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students must have laboratory coat and safety goggles

....

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 353

The depth of knowledge and practical skills required by health professionals in the 21st century are very different to that which was required in the past. Medical treatment of illness and disease has become increasingly technical and health professionals are expected to work in partnership in determining patient care. In order to achieve this, today's health professional must have a basic understanding of the fundamental scientific principles behind both the diseases and their treatments. Increasingly, modern health science is concerned with maintaining health as a way of preventing disease and this is achieved through a holistic approach to the human state. This unit is an introduction to the basic concepts in mathematics, physics, chemistry and biology that will be required in order to commence any tertiary health science course.

300463.2 Fundamentals of Mechanics

Credit Points 10 **Level** 1

Equivalent Units

700023 Fundamentals of Mechanics (UWSC), 700113 Fundamentals of Mechanics (UWSC Assoc Deg)

....

This unit deals with the action and interaction of forces, moments and couples in two and three dimensions. It examines the equilibrium of single bodies, and of trusses and mechanisms. It then looks at the friction between bodies. It covers the dynamics of a non-rotating body, and a body rotating about a fixed axis. Finally, internal loadings are investigated, particularly within a transversely loaded beam. The unit makes extensive use of vector algebra.

700023.2 Fundamentals of Mechanics (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300463 - Fundamentals of Mechanics, 700113 - Fundamentals of Mechanics (WSTC Assoc Degree)

Special Requirements

Students must be enrolled atWestern Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7033 Bachelor of Engineering (WSTC FYP) or 7082 Bachelor of Engineering Extended (WSTC FYP) or 7034 Diploma in Engineering or 7066 Diploma in Engineering Fast Track must pass 700145 Foundation Physics 2 before enrolling in this unit.

....

This unit deals with the action and interaction of forces, moments and couples in two and three dimensions, on machine elements and simple structures. It examines the equilibrium of single bodies, of multi-body structures and of mechanisms. It then covers the dynamics of a particle. A systematic approach to solving practical engineering design problems is provided. The unit makes extensive use of vector algebra.

300950.2 Fundamentals of Medical Concepts and Terminology

Credit Points 10 **Level** 2

Prerequisite

300566.2 Introduction to Health Informatics

....

This unit is designed to provide the student with the knowledge necessary to understand the information contained in the health record, to function in a medical environment through an understanding of the fundamentals of medicine and to effectively use disease classification systems. Within each body system, the student will study anatomy and physiology, disease processes and their treatment, and medical terminology (disease titles, symptomatic terms, surgical terms and investigations). The unit will also focus on specialist topics such as mental health, obstetrics, paediatrics, infectious diseases, oncology, radiotherapy, nuclear medicine, diagnostic and surgical interventions.

300491.2 Games Technology

Credit Points 10 **Level** 2

Assumed Knowledge

A basic understanding of the principles of programming equivalent to Programming Principles 1.

Equivalent Units

300162 - Client Server Applications

....

This unit provides an introduction to the game industry as well as introducing students to the techniques of game design and construction. Students will be exposed to the history of game development and the key aspects of different genres of computer games.

300844.1 General Microbiology

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of introductory biology, especially an understanding of the diversity of living organisms and basic concepts of cell structure and function is essential for students undertaking this unit.

Prerequisite

300816.1 Cell Biology OR **300802.1** Biodiversity

Equivalent Units

300331 - General Microbiology

Incompatible Units

MI104A - Microbiology 1.1; 300300 - Microbiology 1; 300833 - Microbiology 1

....

Microorganisms play a crucial role in soil and water ecosystems, in health and disease of plants and animals, including humans, as well as in industries such as the food and brewing industries. The unit builds on students existing knowledge of cell biology and biodiversity, and explores the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 354

characteristics of micro-organisms, the conditions required for their growth and survival, methods of control and their significance in the environment, health and industry. The theory and practice of microbiology are integrated in the laboratory component in which students learn techniques of handling, observing, growing and counting microorganisms.

300820.1 Genes, Genomics and Human Health

Credit Points 10 **Level** 3

Prerequisite

300845.1 Genetics OR **300817.1** Molecular Biology OR **300936.1** Functional Proteins and Genes OR **300848.1** Metabolism

....

Genomics is the application of our knowledge of the structure and expression of genomes to understanding gene function and the genetic basis of human disease. The Unit will begin with an introduction to the human genome and its relationship to the genomes of other organisms. It will also teach how genome-wide analysis of genetic variation in individuals and populations is improving our understanding of diseases such as asthma, heart disease, obesity, dementia and cancer. Practical application of genomics in the areas of pharmacogenomics, gene therapy/ genetic medicine, genetic discrimination and ethics will also be covered.

300845.1 Genetics

Credit Points 10 **Level** 2

Prerequisite

300816.1 Cell Biology OR **300802.1** Biodiversity OR **300813.1** Wildlife Studies

Equivalent Units

BI201A - Genetics 2.2; 300547 - Human Genetics; 300623 - Genetics

....

Genetics has a lot to do with sex and how genes are passed from one generation to the next. This unit introduces the student to the important conceptual issues in genetics from Mendel to DNA, from chromosomes to population genetics and from peas and fruit flies to genomics. While there is an emphasis on Mendelian and population genetics the unit also covers important concepts in molecular genetics demonstrating the link between genotype and phenotype. As the semester proceeds students are encouraged to makes links between concepts and problem solving through a series of exercises that enhance an analytical view of genetics.

101694.2 Geographies of Migration

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 80 credit points.

....

An international and cross-institutional discussion of immigration and settlement. Covering the theory and

experience of immigration. Considers the international and national regulation of immigration and settlement policies, as well as refugee policy. Case studies are from Australia and Canada, and Singapore. Within mixed tutorial groups (with students from Singapore, Vancouver & Sydney) students will exchange experiences and opinions of immigration.

102200.1 Global Criminology and Human Rights

Credit Points 10 **Level** 7

Assumed Knowledge

Undergraduate degree in criminology, criminal justice or a related social science area, or equivalent.

Special Requirements

Students must be enrolled in a postgraduate course.

....

Global criminology is concerned with the process of respecting and fostering ideals of justice, the rule of law and human rights in an expanding range of transnational and domestic locations. These include stable, divided and post-conflict societies that are variously dealing with issues of discrimination, exploitation, insecurity and violence via international agreements, judicial and political means. The global development of justice initiatives has challenged the traditional criminological concern with individual offenders prosecuted by the sovereign nation state acting on behalf of a sole victim. In this unit students will gain a critical understanding of theories and concepts of global criminology, detail of the key aspects and uses of international criminal law, and the potential of alternative modes of attaining social justice. Case studies from around the globe will be analysed along with an emphasis placed on assessing the significance of issues, rights and justice reforms in developing regions.

101910.1 Global History

Credit Points 10 **Level** 1

Equivalent Units

101673 - The First Globalisation, 700134 - Global History (UWSC)

....

Globalisation has reshaped the entire world over the past 500 years. This unit focuses on the main dynamics leading to a more integrated world. It analyses the major transformations that human societies experienced during the past five hundred years, when many societies transitioned from agrarian societies to modern nation-states. The unit focuses on the expansion and contraction of European and Asia empires, the rise of capitalism, the mass migration of peoples, the distribution of plants, animals, and diseases. There is also discussion of resistance to globalisation, including cultural, political, military, and religious movements. By considering these processes, we can gain an understanding of modern history and our globalised world.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 355

Western Sydney University

300917.1   Global Nutrition, Food and Community

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of human nutrition and associated health issues

Prerequisite

300933.1 Nutrition and Health 1

Equivalent Units

300651 - Nutrition and Community Health, 300786 - Global Nutrition Food and Community

....

This unit aims to develop an understanding of the inter relationship between nutrition and health in Australian and Global contexts. The aim is to provide the student with a sound foundation in nutritional anthropology, public health nutrition and health promotion in order that they can systematically analyse nutritional problems associated with world food issues; including those affecting minority and culturally and linguistically diverse groups within Australia; diseases of affluence and current health and nutrition issues in the community. An important objective of the unit is that students learn the principles of health promotion and how to apply effective nutrition promotion strategies in community and population settings in order to reduce the burdens of various nutritional and lifestyle related disorders and diseases like: obesity, some cancers, diabetes and cardiovascular disease and malnourishment.

101735.2   Global Politics

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The experiences of globalization are explored from a variety of levels across time and space, from the individual to the local, the national to the international. The focus in this course will be on issues of politics, both domestic and international, but we will keep in mind that globalization is a phenomenon that is explored and assessed by a wide range of disciplines, including history, sociology, politics, law, economics, anthropology, gender studies, human geography, economics, regional and area studies, science and technology, health and epidemiology.

200815.2   Globalisation and Sustainability

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of economic concepts

....

Globalisation and Sustainability introduces students to critical debates about the role of global and national institutions of power in determining economic, environmental, social and cultural outcomes. Students will be introduced to opposing and controversial theoretical

perspectives on globalisation and sustainability and issues relating to Aboriginal and Torres Strait Islander peoples to improve policy and practice in the future. In the process students will be encouraged to consider problems relating to ethics, rights, justice and democracy in society. This unit can also be taken by students who have studied social science and humanities.

300729.2   Graphic Communication and Design

Credit Points 10 **Level** 1

Equivalent Units

BG105A - Graphic Design and Communication, 700150 Graphic Communication and Design (UWSC)

....

This unit is designed to provide students with the knowledge and skills necessary to develop graphic communication, basic CAD skills and elementary design skills suitable for application within the building industry. Content: This unit provides students with an introduction to elements of graphic communication skills necessary to comprehend various building types in plan, section, elevation, isometric and perspective views. The unit also introduces students to basic CAD (Computer Aided Design and Drafting) concepts and skills. Students will also be required to develop appropriate analytical and problem solving skills in dealing with a realistic building project.

700150.1   Graphic Communication and Design (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300729 - Graphic Communication and Design

Special Requirements

Students must be enrolled at UWSCollege.

....

This unit is designed to provide students with the knowledge and skills necessary to develop graphic communication, basic CAD skills and elementary design skills suitable for application within the building industry. This unit provides students with an introduction to elements of graphic communication skills necessary to comprehend various building types in plan, section, elevation, isometric and perspective views. The unit also introduces students to basic CAD (Computer Aided Design and Drafting) concepts and skills. Students will also be required to develop appropriate analytical and problem solving skills in dealing with a realistic building project.

700150.2   Graphic Communication and Design (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300729 - Graphic Communication and Design

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 356

pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit is designed to provide students with the knowledge and skills necessary to develop graphic communication, basic CAD skills and elementary design skills suitable for application within the building industry. This unit provides students with an introduction to elements of graphic communication skills necessary to comprehend various building types in plan, section, elevation, isometric and perspective views. The unit also introduces students to basic CAD (Computer Aided Design and Drafting) concepts and skills. Students will also be required to develop appropriate analytical and problem solving skills in dealing with a realistic building project.

301074.1   Graphics 1: 2D and 3D Industrial Design Communication

Credit Points 10 **Level** 1

Equivalent Units

300302 - Industrial Graphics 1: Presentation

....

Design visualisation in the form of 2D and 3D graphics is a necessary component of the overall design process. This unit introduces students to using different types of representation; from low-fidelity to high-fidelity (ideation through sketching, scaling and accuracy, prototyping in 2D and 3D). Students will learn through project work in which they integrate use of different software tools and drawing skills to realise and communicate their ideas and design intent.

301076.1   Graphics 2: Visual Simulation

Credit Points 10 **Level** 2

Equivalent Units

300310 - Industrial Graphics 3: 3D Solids

....

Three-dimensional digital simulations are used to model manufactured artefacts, create virtual environments and simulate dynamic processes or systems. In this unit students will use surface modelling software to simulate static and dynamic 3D structures. High quality photorealistic rendering and 3D printing file preparation will also be covered.

301079.1   Graphics 3: 3D Engineering Specifications and Visualisation

Credit Points 10 **Level** 2

Prerequisite

301076.1 Graphics 2: Visual Simulation OR **300964.1** Introduction to Engineering Practice

Equivalent Units

300282 - Industrial Graphics 2: Transition

....

This unit introduces formal graphical communication methods used by professionals engaged in the design,

manufacture and management of manufactured items. Students will learn how to follow Australian Standards for engineering drawings, and to use Computer-Aided Design (CAD) software for accurately representing and modelling basic parts and assemblies. The documentation of design concepts in the form of three dimensional (3D) computer models provides data that can be applied in a wide variety of ways to facilitate the understanding and production of parts and assemblies. The objective of this unit is to introduce students to the industry standard software and hardware employed to generate these models, via a "hands on" approach to creating 3D data. Issues such as data transfer, rapid prototyping, computer numerical control (CNC) machining and visualisation will also be discussed.

301091.1   Graphics 4: Kinetic Narratives

Credit Points 10 **Level** 2

Prerequisite

301079.1 Graphics 3: 3D Engineering Specifications and Visualisation

Equivalent Units

300312 - Industrial Graphics 4: Surface

....

This unit introduces students to real life applications of graphics technology, such as 3D games, 3D virtual environments, immersive learning spaces, dynamic 3D simulations of ecosystems, artwork for public spaces, virtual agents. Students will use different software platforms to create interactive 3D environments. They will apply theories of human-computer interaction to design projects where they develop: "a dynamic simulation of a natural or artificial ecosystem", a dynamic 3D virtual environment in which users interact with agents.

301092.1   Graphics 5: Creative Computing

Credit Points 10 **Level** 3

Assumed Knowledge
It is preferable students should have already undertaken previous units in the stream from G1 - G4 and other units such as HCI and Tangible Design.

Prerequisite

301091.1 Graphics 4: Kinetic Narratives

Special Requirements
Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

Students will undertake a significant project combining tangible and intangible components of a proposed design solution. Students will be able to choose the topic of the project, based on their interests, the novelty of the topic and with coordinator approval. The project will combine knowledge of graphics and visualisation with tangible design, to link components or actors in the real world with those in a virtual world, for example using augmented reality.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 357

301097.1 Greenhouse Technology for Food Sustainability

Credit Points 10 **Level** 2

Assumed Knowledge

Students entering this unit should have knowledge of least one of the following subject areas: horticultural production systems; environmental sustainability analytics; technological design and development; consumer behaviour and/or marketing principles; health promotion and/or human nutrition.

....

Greenhouses are enclosed structures that optimise temperature, light, water and carbon dioxide to maximise plant production. Also called 'greenhouse horticulture', these advanced systems integrate technologies across disciplines (e.g. horticultural, environmental and material sciences; mechanical engineering and design; robotics and computing programming) to create futuristic indoor environments that increase the quantity and quality of plant-derived foods. Controlled environments can significantly reduce reliance on inputs (fertiliser, pesticide, energy and water) and reduce environmental impacts (including 'food miles'). This unit explores a range of greenhouse technologies in Australia and overseas—from simple low-cost options, through to cutting-edge technology in energy and water-efficient production. Students will observe current status and future trends in the industry to examine how advanced technologies can improve sustainability measures along with the reliability of horticultural output. Students will consider how innovative horticultural enterprises can provide consumers with greater capacity to adopt more sustainable diets.

200925.1 Growth, Cycles and Crises

Credit Points 10 **Level** 3

Equivalent Units

200816 - Economic Theories, Controversies and Policies

....

Growth, Cycles and Crises gives students an up-to-date understanding of macroeconomic developments, empirical puzzles, theoretical controversies and policy dilemmas of the day. It begins with an overview of different schools of thought and their historical roots. There follows an investigation of recent global crises, their underlying causes, and the policy responses in the major economic powers. We also consider the stresses on Australia resulting from global economic fluctuations and shifts, causing disruptive exchange rate swings and fiscal difficulties. Finally with major developments around the world and the controversies arising from them, such as debt crises and austerity debate, the problem of unbalanced growth in rapidly developing economies, and stagnation and policy zigzags apparent in some advanced economies.

400896.1 Gymnastics and Dance

Credit Points 10 **Level** 3

Incompatible Units

100671 - Human Movement 5, 100672 - Introduction to Dance

....

Students will actively engage in a variety of dance styles and gymnastics movement experiences to develop their own composition and skill competencies. In the gymnastics component of this unit, students will participate in floor routines and strength and conditioning activities, and will develop skills on the vault, bars and beam. In the dance component of this unit, students will gain experience in a variety of dance styles, including line dance, indigenous dance, ballet, contemporary dance, and hip hop. Students will examine the elements of movement and composition that underpin these physical activities in order to plan and implement quality-learning experiences.

102296.1 Hadith: The Prophetic Tradition

Credit Points 10 **Level** 1

....

Islam is a way of life which is governed by the Qur'an, the Muslim principal source of guidance. However, while the Qur'an is the foundation of authority in Islam, it provides few legal injunctions. Hadith (the saying, deeds, and actions of Prophet Muhammad) forms the basis for the details of Islamic law and for many tenets of Islamic creed. This unit introduces students to the second most fundamental source of Islam, Hadith. It aims to familiarise students with the origins of the Hadith, its overall structure, content, and importantly its function in Muslim living and to assist them in understanding contemporary issues and debates surrounding Islam.

101716.3 Healing and Culture

Credit Points 10 **Level** 3

Incompatible Units

100886 - Special Topics in Cultural and Social Analysis

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit takes as its starting point the idea that disease has social and cultural as well as biological origins. What people define as good health and illness, and how they treat the latter are profoundly shaped by cultural frameworks. Healing practices, including biomedicine, are underpinned by cultural understandings and larger configurations of power. We will examine notions of disease causality across cultures and explore the argument that good and ill health are about more than just the body. Popular understandings of illness and its origins, and techniques for responding to and seeking to remedy illness can be a reflection of how different societies imagine their place in the world.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 358

700226.2 Health Care Environments (WSTC Prep)

Credit Points 10 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

Healthcare environments are diverse and ever-changing. The delivery of health care services in Australia and every other country in the world is different. The health care system and health care environment has a massive impact in terms of life expectancy of the population within a country, the quality of life experienced and an individual's wellbeing. This unit aims to give students an understanding of the different elements that constitute the health care system in Australia and the impact these elements have to National and individual health. Other health systems will also be examined abroad looking at countries such China, Canada, England, Singapore, USA, North Korea, Nepal, England and the Netherlands.

401009.1 Health in a Culturally Diverse Community

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, professional communication, foundational knowledge of the behavioural sciences and their relationship to nursing or midwifery and nursing or midwifery practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing; 4692 Bachelor of Nursing Graduate Entry; 4693 Bachelor of Nursing (Advanced) or 4684 Bachelor of Midwifery.

....

This unit enables nursing and midwifery students to investigate and discuss the concepts of health and illness in the context of culturally diverse communities. The unit promotes the attainment of critical knowledge and core principles necessary for students to become holistic, culturally sensitive and appropriately adaptable when meeting the health needs of Aboriginal and Torres Strait Islander People and people from other diverse cultural backgrounds. A case study approach provides a framework for students to explore the impact of different attitude and value systems relating to the health of people in Australia.

400275.2 Health Planning Project

Credit Points 10 **Level** 3

Prerequisite

400273.1 Health Politics, Policy and Planning

....

This unit extends the theoretical concepts introduced in the unit, Health Politics, Policy and Planning with an emphasis on practical application. It concentrates on the development of analytical skills required for comprehensive assessment, planning, implementation and evaluation of health

programs or projects. The subject is designed so that students, functioning as a working party, undertake a real life health planning project on a current issue. Students thus develop knowledge of and skills in negotiation, group work, committee structure and functioning, the consultation and research processes, the planning process and report writing.

401195.1 Health Politics, Policy and Planning

Credit Points 10 **Level** 3

Equivalent Units

400966 - Health Politics, Policy and Planning. 400273 - Health Politics, Policy and Planning

....

The Australian health care system is highly complex, consisting of inter-related sub-systems and it is influenced by the broader socio-political environment. It is essential that health professionals understand and consider the economic, political and social context within which health policy and planning occur, so that strategies and policies are developed which are economically and politically viable, as well as socially acceptable and responsive to the actual needs of the community. This unit aims to develop apply policy making and planning processes within this broad context.

400210.2 Health Promotion and the Nurse

Credit Points 10 **Level** 7

Assumed Knowledge

Students require fundamental knowledge and understanding of health and wellness concepts at the undergraduate level, with experience as a registered nurse in health care settings.

Special Requirements

Students must be enrolled in a postgraduate course.

....

The challenge for nursing in terms of health promotion is to acknowledge the complex interrelatedness between a person's social and economic situation, their sense of power and control over their life and their physical, emotional and spiritual well-being, i.e. To understand that health is determined by the totality of a person's life circumstances and their inherent traits. This unit uses a social health perspective to examine evidence-based health promotion strategies that can be implemented in the context of nursing practice.

400784.3 Health Promotion Practice 1

Credit Points 10 **Level** 3

Prerequisite

400867.2 Approaches to Health Promotion

Special Requirements

Must meet University and NSW Health placement compliance requirements: University requirements: 1) Senior First Aid Certificate (accepted certificate numbers include HLTFA311A, HLTFA301B and HLTAID003). 2) RMS Working With Children Check. 3) UWS Student Undertaking Form NSW Health requirements: 1) National

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 359

Police Certificate; International Students must also provide an Overseas Police Check (with English Translation). 2) A completed adult vaccination card with serology results attached. 3) Three forms completed; a. NSW Health Code of Conduct, b. TB Assessment Form, c. NSW Health Student Undertaking/Declaration form; International students need to take a statutory declaration signed by a Justice of the Peace.

....

This unit builds on the knowledge gained in Approaches to Health Promotion. It provides the opportunity to apply health promotion theory to practical projects in the field related to current population health priorities, through 120 hours service learning experience. It is concerned with developing knowledge and skills related to needs analysis, prioritising, and awareness of core values and principles associated with health promotion practice.

400785.2   Health Promotion Practice 2

Credit Points 10 **Level** 3

Prerequisite

400867.1 Approaches to Health Promotion AND **400784.2** Health Promotion Practice 1

Equivalent Units

400276 - Community Development and Health

Special Requirements

Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

This unit builds on the knowledge gained in Health Promotion Practice 1 through continuing with phases necessary for project design and management health promotion. It provides the opportunity to apply health promotion theory to practical projects in the field related to current population health priorities, through 120 hours service learning experience. It is concerned with developing knowledge and skills related to implementation and evaluation of health promotion projects, showing awareness of core values and principles necessary for effective health promotion practice.

400279.4   Health Services Financial Management

Credit Points 10 **Level** 3

Prerequisite

400787.2 Health Services Management Practice

Special Requirements

Students must be enrolled in 4545 or 4656 Bachelor of Health Science. Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

The Australian health care system must account for use of resources, and ensure their equitable and efficient use. Increasingly devolution of management function to cost centre level in health care organisations is occurring. Managers must consider the financial implications of clinical decisions, understand and act on accounting information. They are held responsible for the financial outcomes of their activities. This unit develops a basic knowledge of accounting principles, health services funding arrangements, government reforms, financial reporting, preparation of budgets, business cases and economic appraisals. There are 140 hours of placement in the field working with health managers on financial issues.

400277.4   Health Services Management

Credit Points 10 **Level** 2

Prerequisite

300955.1 Healthcare Data Environments

Equivalent Units

700068 - Health Services Management (UWSC)

Special Requirements

300955 Healthcare Data Environments is a pre-requisite for students only in course 3711.

....

NOTE: The ONLINE offering is currently only available to students in the Public Health Key program. The health workplace is a complex and sophisticated environment that can be understood in many different ways and mean different things to different members of an organisation. Assumptions about organisational structure and action are based on conceptualisations and beliefs about the nature and goals of an organisation. This unit aims to develop an understanding of organisational theory and its application to management practice and organisational analysis in the health arena.

400787.2   Health Services Management Practice

Credit Points 10 **Level** 3

Prerequisite

400277.3 Health Services Management

Equivalent Units

400278 - Health Services Management 2

Special Requirements

Students must be enrolled in 4545 or 4656 Bachelor of Health Science. Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

The unit begins with an overview of the complexity and variability of health services and provides an understanding of component organisations, federal and state policy issues and environmental factors including the role of the private sector and non-government organisations. The changing role of the health services manager and competencies

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 360

required for effective managing are examined. Influences on organisations are reviewed, including structures, culture, power and politics. Various management functions are explored through 140 hours of placement e.g. strategic planning, performance management, people management including workplace relations, conflict resolution, resource management (financial and asset), risk management, OH&S and quality assurance.

400788.3   Health Services Workforce Management

Credit Points 10 **Level** 3

Prerequisite

400787.2 Health Services Management Practice

Special Requirements

Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

This is a flexible learning unit looking at HRM as a strategic activity of health organisations especially as workforce shortages pose significant challenges to the health and aged care sectors. The workforce, with appropriate knowledge and expertise, is essential to the efficient and effective delivery of quality health services. Successful organisations shape their workforce to anticipate current and future business directions and goals. Workforce planning is a crucial element of this approach and its success.

401010.1   Health Variations 1

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, immunity, wound healing, infection control, basic concepts in pharmacology and pathophysiology and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Adanced) or 4692 Bachelor of Nursing Graduate Entry.

....

This unit provides the theoretical background knowledge for Professional Practice 3. It introduces the student to the fundamental principles of perioperative nursing care in supporting clients undergoing surgical interventions incorporating the related pathophysiology and pharmacology. In particular, nursing care of surgical interventions relating to the gastrointestinal, reproductive and musculoskeletal systems with a Health Priority Focus relating to Injury Control, Arthritis and Cancer Control will be the focus of case history reviews.

401014.1   Health Variations 2

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4692 Bachelor of Nursing Graduate Entry.

....

This unit explores the concepts of chronicity, disability, habilitation and rehabilitation in relation to chronic conditions, functional and intellectual disabilities and their implications for nursing practice. National Health Priority Case Studies drawn from across the lifespan will provide a focus for exploring pathophysiology, pharmacological interventions and nursing care related to chronic conditions of the endocrine, neurological and respiratory body systems. In addition, the nursing role in supporting those with physical and intellectual disability will be examined. This unit provides theoretical underpinnings directly related to Professional Practice Experience 4.

401024.1   Health Variations 2 (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit for advanced nursing students explores the concepts of chronicity, disability, habilitation and rehabilitation in relation to chronic conditions, functional and intellectual disabilities and their implications for nursing practice. National Health Priority Case Studies drawn from across the lifespan will provide a focus for exploring pathophysiology, pharmacological interventions and nursing care related to chronic conditions of the endocrine, neurological and respiratory body systems. In addition, the nursing role in supporting those with physical and intellectual disability will be examined. This unit provides theoretical underpinnings directly related to Professional Practice Experience 4.

401015.1   Health Variations 3

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 361

Units

National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4692 Bachelor of Nursing Graduate Entry or 4693 Bachelor of Nursing (Advanced).

....

This unit uses National Health Priority case histories to further develop knowledge of pathophysiology, pharmacology and nursing implications for people across the lifespan who may experience acute exacerbations of chronic conditions. A major focus will be related to the nursing management of chronic conditions involving the cardiovascular and renal systems. Nursing management involving acute exacerbations of chronic conditions affecting the respiratory and musculoskeletal system will also be reviewed. This unit provides theoretical underpinnings for Professional Practice Experience 4.

401018.1   Health Variations 4

Credit Points 10 **Level** 3

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4692 Bachelor of Nursing Graduate Entry.

....

This unit introduces the theoretical background information required for Professional Practice 5 by providing the related pathophysiology, pharmacology and nursing implications to assist students in caring for people who experience an acute life-threatening and/or traumatic condition that may involve multiple systems failure. National Health Priority case histories used in the unit will focus on cardiovascular disease, injury prevention and control. Consideration will also be made in relation to habilitation and rehabilitation of these people who have experienced acute life-threatening or traumatic complex health issues.

401026.1   Health Variations 4 (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit introduces the theoretical background information required for Professional Practice 5 by providing the related pathophysiology, pharmacology, nursing implications and

advanced assessment skills to assist students in caring for people who experience either an acute life-threatening and/ or traumatic condition or rapid deterioration in their health status which may also involve multiple systems failure. National Health Priority case histories will be used within the theoretical component of the unit and will predominantly focus on cardiovascular disease, injury prevention and control. Consideration will also be made in relation to habilitation and rehabilitation of people who have experienced acute life-threatening or traumatic complex health issues. The workshops will be used to provide the student with the necessary advanced assessment, clinical skill and simulation experiences to recognise the deteriorating patient with potential life-threatening conditions and intervene with reporting, monitoring and initiation of treatments skills.

401019.1   Health Variations 5

Credit Points 10 **Level** 3

Assumed Knowledge

Primary health care, foundational knowledge of human biological sciences including human body systems, basic concepts in pharmacology and pathophysiology and the National Health Priorities and the relationship to nursing practice.

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry.

....

This unit develops a student's knowledge and skills in a palliative approach when caring for individuals and their families who are experiencing Life limiting illness. Case histories featuring a lifespan approach and that address the National Health Priority Areas will be used to illuminate the palliative approach as a model of care. Students will explore the benefits a palliative approach when supporting dying individuals with any life limiting illness. Students will also acquire the capabilities to develop self-care strategies to manage their own grief and loss. This unit provides theoretical underpinning for Professional Practice 5.

300955.1   Healthcare Data Environments

Credit Points 10 **Level** 3

Prerequisite

300566.1 Introduction to Health Informatics

Equivalent Units

300567 - e-Health

Special Requirements

Students in 3663 - Graduate Certificate in Health Informatics are not required to complete the pre-requisite unit 300566 - Introduction to health Informatics before enrolling in 300955 - Healthcare Data Environments.

....

This unit extends the students knowledge of Health Informatics by introducing concepts relating to electronic communications within the Health Industry. It exposes students to a variety of environments used to create, store, transfer and deliver healthcare data. Areas include

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 362

minimum data sets, data linkage, messaging concepts/ standards, terminologies, healthcare evaluation, electronic health records and related Standards, security, privacy and trust, epidemiology and population health together with TeleHealth/ TeleMedicine approaches, methodologies, tools and techniques.

300956.1   Healthcare Software and Systems

Credit Points 10 **Level** 3

Prerequisite

300566.2 Introduction to Health Informatics

Equivalent Units

300568 Services Computing in Healthcare

....

In this unit students will learn the concepts underpinning the services computing paradigm of "bridging the gap between Business Services and IT Services". Services Computing technology includes Web services and serviceoriented architecture (SOA), business consulting methodology and utilities, business process modelling, transformation and integration. Students will learn, through the development of practical examples, how to utilise these technologies within a healthcare context

102069.1   Heritage and Planning

Credit Points 10 **Level** 7

....

This unit explores the values behind, and practicalities regarding, heritage and planning, from federal and state perspectives in Australia. With a specific focus on Sydney, the unit explores how planning applications, within the urban development sphere, impact upon heritage assets, and how these impacts are mitigated through heritage planning legislation. The unit asks students to step into the shoes of heritage planning professionals and to identify and research a heritage asset that is to be impacted by a potential planning proposal and then to design an appropriate mitigation response within the bounds of relevant heritage legislation.

300988.1   Highway Infrastructure

Credit Points 10 **Level** 3

Prerequisite

300733.2 Introduction to Structural Engineering AND **300985.1** Soil Mechanics

....

This unit focuses on two key aspects of highway infrastructure design, namely, the bridge superstructure design and the foundation soil preparation prior to construction of the highway pavement. It aims to provide students with specialised knowledge in bridge loading and structural design, methods to deal with soft and weak grounds, and building of earth embankments to support the highway pavement. These aspects will be discussed in relation to Australian design codes.

102043.1   Historical Linguistics

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge of fundamental linguistic terminology, introductory level linguistics; preferably phonetics/ phonology and structure of language.

Prerequisite

101945.1 Introduction to Linguistics

Corequisite

102042.1 The Sound of Language AND **101948.1** Structure of Language

Equivalent Units

101452 - History of the English Language

Special Requirements

Successful completion of 60 credit points including the pre-requisite unit listed above.

....

This unit provides an introduction into the study of language change. It discusses fundamental questions such as how and why languages change, how we can investigate and theoretically capture language change, as well as how language change is connected to sociocultural change with special focus on the linguistic habitat of Australia.

102006.2   Histories of Crime and Punishment

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines the way crime and punishment has been defined and practiced in a range of different historical periods, and how laws and customs have shaped them. It provides an opportunity for students to improve their research and communication skills and enhance their ability to work as part of a team.

100507.4   History of Modern China to 1949

Credit Points 10 **Level** 3

Equivalent Units

63177 - History of Modern China 1850-1949: Reform and Revolution.

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This Asian history unit is concerned with the transformation of China in a social, political and intellectual context since the middle of the nineteenth century. The unit focuses on China's modern transformation in the first half of the twentieth century and its contemporary relevance. The scope is broad, encompassing changes from the last decades of the Qing Dynasty to the Republican era and the

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 363

rise to power of the Communists in 1949. The approach is issue-oriented, thematic and, where appropriate, chronological.

102184.1   History of Muslim Civilisations and Ideas

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit focuses on intellectual, societal, institutional and technological developments within the Muslim world. It looks at comparisons and interconnections between regions and peoples and outlines the history and context of Muslim political thought from the death of Mohamed to the contemporary period. The unit will have a strong historiographical focus that examines 'Islamic data-sets' and assesses the concepts of primary and secondary source materials which conventionally are used to construct interpretations of the past.

101991.1   History of Sexuality

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit introduces students to some key debates about the definition and origin of sexuality as a concept, and to the historical origins of particular sexual identities and the political values attributed to them. It teaches students to take account of the differing ways that forms of desire, pleasure, obscenity, pornography, perversion, sin and transgression have been articulated across time and place. In the unit we traverse an array of temporal moments and geographic loci, drawn to the 'hotspots' of historiographic contention.

401172.1   Honours Project (Medicine)

Credit Points 0 **Level** 5

Assumed Knowledge

Students will be expected to have applied knowledge and skills in designing and conducting research following completion of the pre-requisites, as described below.

Prerequisite

400977.2 Integrated Clinical Rotations 3

Corequisite

400978.2 Integrated Clinical Rotations 4

Incompatible Units

400959 - Honours Research Project 1, 400960 - Honours Research Project 2

Special Requirements

Due to the GPA requirements for the Honours Award, this Unit is restricted to students enrolled in 4641 MBBS or 4671 MBBS BA who have achieved an overall course GPA

≥ 5.5 (combining grades from 400861 Foundations of Medicine 1, 400862 Foundations of Medicine 2, 400810 Integrated Clinical Rotations 1, 400811 Integrated Clinical Rotations 2 and 400977 Integrated Clinical Rotations 3) in order for the student to have a realistic expectation of achieving an Honours Award ≥ Class II Division II. Students must be concurrently enrolled in Unit 400978 Integrated Clinical Rotations 4 in Session 2H to be enrolled in this Unit. Prior to enrolment in the Unit, students must have satisfactorily completed a Research Portfolio which has been pre-approved by the School of Medicine Research and Higher Degree Committee. A School of Medicine Research and Higher Degree Committee pre-approved Research Portfolio, comprising written documentation and evidence of a pre-approved program of research, and a research supervisor endorsement stating that 200 hours was spent on the research. To obtain pre-approval, a structured research proposal, endorsed by a research supervisor, must be submitted to the School of Medicine Research and Higher Degree Committee for review. The research proposal may be submitted to the Research and Higher Degree Committee for consideration anytime between the completion of Unit 400861 Foundations of Medicine 1 and before commencement of Unit 400811 Integrated Clinical Rotations 2. Pre-approval must be obtained prior to collecting evidence towards the Research Portfolio. The Research Portfolio will comprise written documentation and evidence of a pre-approved program of research, including a research supervisor endorsement stating that 200 hours was spent on the research.

....

Students who meet prerequisite requirements are offered an opportunity in this Unit to undertake enhanced research and scholarship activities while enrolled in the Bachelor of Medicine / Bachelor of Surgery (MBBS) 4641.5. A key objective is to assist students towards the independent application of knowledge and skills in the principles and methods of medical research on a specialist topic of their choice. With supervision, students will further develop their ability to critically evaluate theories and evidence in disciplines relevant to medicine, and to disseminate their work to a range of audiences.

400945.1   Honours Research 1

Credit Points 20 **Level** 5

Prerequisite

400944.1 Evidence-Based Practice (Advanced)

Special Requirements

This unit is relevant to honours students in health science courses studying their honours as part of an embedded program of study. This unit is specifically tailored to accommodate the course and progression requirements of such students and therefore is not relevant as a general elective.

....

This unit commences the significant research component of the student's honours degree. Students will work on their specific research project in conjunction with their supervisor, engaging in the early stages of the research process related to critical review of the literature, designing their project, considering ethical dimensions of their study, and collecting data. The emphasis of this unit is on the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 364

application of research knowledge gained in other units to the practical conduct of the individual honours project.

400946.1 Honours Research 2

Credit Points 20 **Level** 5

Prerequisite

400945.1 Honours Research 1

Special Requirements

Students must be enrolled in a health science course and studying honours as part of an embedded program of study. This unit will be specifically tailored to accommodate the course and progression requirements of such students and is not relevant as a general elective.

....

In this unit students will complete the significant research component of their honours study. They will build upon the skills and knowledge of research, evidence-based practice and scholarly enquiry gained in units completed earlier in the program. The emphasis of this unit is the completion of a supervised honours research project. Each student will work individually with their supervisor to complete the stages of data collection and data analysis and will write their results into a format suitable for submission for examination. Students will also present their final at a student conference that is at professional conference level.

401046.1 Honours Research 2 (Podiatric Medicine)

Credit Points 20 **Level** 5

Prerequisite

400945.1 Honours Research 1

Special Requirements

Students must be approved to study Podiatric Medicine Honours.

....

In this unit students will complete the significant research component of their honours study. They will build upon the skills and knowledge of research, evidence-based practice and scholarly enquiry gained in units completed earlier in the program. The emphasis of this unit is the completion of a supervised honours research project. Each student will work individually with their supervisor to complete the stages of data collection and data analysis and will write their results into a format suitable for submission for examination. Students will also present their final at a student conference that is at professional conference level.

400872.2 Honours Research Design and Methodology

Credit Points 20 **Level** 4

Assumed Knowledge

At least one unit in research methodology in an undergraduate degree program.

Equivalent Units

400471 - Exercise & Health Science Research & Practice, 400472 - Exercise & Health Science Honours Seminar

....

Students will build upon the skills and knowledge of research, evaluation and scholarly enquiry gained in units completed in the undergraduate program. The unit aims to explore: the nature of research and experience of researching in health related areas, as well as technical skills of data collection, management, analysis and interpretation in health practice. A major outcome of the unit is the development of a formal project proposal for conducting the student's thesis inquiry. Ethical issues and aspects such as human rights and ethics clearances, confidentiality and respect for participants in research projects and the obligations placed on researchers will be covered. This unit will also provide students with a professional forum in which to discuss and present major aspects of their research project.

400898.2 Honours Thesis in Health Science A

Credit Points 20 **Level** 4

Incompatible Units

400558 - Honours Thesis in Health Science, 400559 - Honours Thesis in Health Science (P/T Year 1), 400560 - Honours Thesis in Health Science (P/T Year 2), 400477 - Sport & Exercise Science Thesis A, 400478 - Sport & Exercise Science Thesis B, 400479 - Sport & Exercise Science Thesis C, 400480 - Sport & Exercise Science Thesis D

....

This unit is the culmination of studies for students who have completed an undergraduate degree in Health Science and provides substantial training in research. Under staff supervision, students choose the particular topic for their research, design their own programme of research, perform the research and analyse the results. The culmination of this process is the production of a thesis in which students describe the rationale for their topic, their research programme, ethical issues, results, and their conclusions.

400899.2 Honours Thesis in Health Science B

Credit Points 40 **Level** 4

Incompatible Units

400558 - Honours Thesis in Health Science, 400559 - Honours Thesis in Health Science (P/T Year 1), 400560 - Honours Thesis in Health Science (P/T Year 2), 400477 - Sport & Exercise Science Thesis A, 400478 - Sport & Exercise Science Thesis B, 400479 - Sport & Exercise Science Thesis C, 400480 - Sport & Exercise Science Thesis D

....

This unit is the culmination of studies for students who have completed an undergraduate degree in Health Science and provides substantial training in research. Under staff supervision, students choose the particular topic for their research, design their own programme of research, perform the research and analyse the results. The culmination of this process is the production of a thesis in which students describe the rationale for their topic, their research programme, ethical issues, results, and their conclusions.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 365

400900.2 Honours Thesis in Health Science C

Credit Points 20 **Level** 4

Incompatible Units

400558 - Honours Thesis in Health Science, 400559 - Honours Thesis in Health Science (P/T Year 1), 400560 - Honours Thesis in Health Science (P/T Year 2), 400477 - Sport & Exercise Science Thesis A, 400478 - Sport & Exercise Science Thesis B, 400479 - Sport & Exercise Science Thesis C, 400480 - Sport & Exercise Science Thesis D

....

This unit is the culmination of studies for students who have completed an undergraduate degree in Health Science and provides substantial training in research. Under staff supervision, students choose the particular topic for their research, design their own programme of research, perform the research and analyse the results. The culmination of this process is the production of a thesis in which students describe the rationale for their topic, their research programme, ethical issues, results, and their conclusions.

400901.2 Honours Thesis in Health Science D

Credit Points 20 **Level** 4

Incompatible Units

400558/400559/400560 - Honours Thesis in Health Science/F-T/P-T year 1/P-T year 2;
400477/400478/400479/400480 - Sport & Exercise Science Thesis A/B/C/D

....

This unit is the culmination of studies for students who have completed an undergraduate degree in Health Science and provides substantial training in research. Under staff supervision, students choose the particular topic for their research, design their own programme of research, perform the research and analyse the results. The culmination of this process is the production of a thesis in which students describe the rationale for their topic, their research programme, ethical issues, results, and their conclusions.

301096.1 Horticultural Production Systems

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of plants

Equivalent Units

300451 - Horticultural Production 2, 300330 - Fruit Production, 300616 - Crop Production, 300815 - Crop Production

....

Food represents the single largest part of your environmental footprint. This means our modern, urban-oriented society must begin to reconnect with the sources of our food to create more sustainable future. This unit explores the scientific basis of sustainable crop production by examining fruit, vegetable and grain enterprises. Management of produce from harvest to consumption will

also be explored to examine factors that impact upon food quality and safety. Students will compare and contrast growing conditions of the highly variable Australian environment to consider the global context for horticultural industry development. By delving into the world of crop management, students will identify the impacts (opportunities and constraints) of plant physiology on the sustainability of food. Students will also consider how novel food products can prompt consumers to appreciate the environmental, economic and social benefits that can arise from sustainable horticultural production.

200708.2 Hospitality Industry

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge of hospitality.

Equivalent Units

200562 - Hospitality Markets, MK301A - Hospitality Marketing

....

With focus on the experiential nature of hospitality products, the unit canvasses a contemporary selection of specialised food services, lodging and other hospitality businesses, including resorts, cruise ships and registered clubs. The unit develops students understanding of the micro and macro environments of such businesses, with concentration on the factors influencing business development. There is also consideration of the design, development and commercial viability of such products, especially in the context of consumer expectations.

200561.3 Hospitality Management Applied Project

Credit Points 10 **Level** 3

Assumed Knowledge

This is an advanced unit, students are expected to have gained an introductory level of knowledge in hospitality management.

Prerequisite

200707.2 Service Industry Studies

Equivalent Units

200140 - Tourism and Hospitality Research Project

Incompatible Units

200580 - Sport Management Applied Project

....

Students studying Hospitality Management Applied Project may have the opportunity to undertake an international field trip to experience the hospitality industry from an international perspective. This unit provides students a unique opportunity to integrate knowledge gained from operational and theoretical perspectives of hospitality studies into application in an engaged research project in hospitality management. Students will engage in comprehensive projects which bring together real world industry problems and hospitality theory.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 366

200584.3 Hospitality Management Operations

Credit Points 10 **Level** 3

Assumed Knowledge

This is an advanced unit. Students are expected to have an introductory level of knowledge in hospitality management.

Equivalent Units

HS206A - Hospitality Management Operations

....

Hospitality Management Operations emphasises the role of operations management in the hospitality sector, especially as an element of corporate strategy. The unit demonstrates how operations management is related to, and aligned with, the other functional areas of a hospitality organisation. The field of study includes revenue management in the hospitality industry, as well as variety of qualitative and quantitative techniques to enable students to analyse problems in hospitality operations.

400868.3 Human Anatomy and Physiology 1

Credit Points 10 **Level** 1

Incompatible Units

300319 Introduction to Anatomy and Histology, 300320 Introduction to Human Physiology, 300361 Introduction to Human Biology, 300752 Introduction to Anatomy and Histology, 300753 Introduction to Human Physiology, 300778 Introduction to Anatomy, 400130 Human Medical Science 1, 400256 Human Medical Science 2

Special Requirements

Students must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science), 4660 Bachelor of Health Science/Master of Traditional Chinese Medicine, 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4662 Bachelor of Health Science/Master of Physiotherapy, 4663 Bachelor of Health Science/Master of Occupational Therapy, 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy, 4669 Bachelor of Health Science (Paramedicine), 4706 Bachelor of Physiotherapy, 4707 Bachelor of Physiotherapy (Honours), 4708 Bachelor of Podiatric Medicine, 4709 Bachelor of Podiatric Medicine (Honours), 4710 Bachelor of Traditional Chinese Medicine, 4711 Bachelor of Occupational Therapy, 4712 Bachelor of Occupational Therapy (Honours).

....

This is the first of two units covering systematic anatomy and physiology at an introductory level. This unit is designed to provide students in applied health science programs with an overview of body systems and their functions to ensure a suitable basis for their future studies. The unit studies the basic concepts of biochemistry and histology, general anatomy and physiology of the major body systems including the central and peripheral nervous systems, integumentary system, musculoskeletal system (bones, muscles and joints), special senses and endocrine system. Emphasis will be placed on the interconnection

and relationship between structure and function at every level of organisation.

400869.3 Human Anatomy and Physiology 2

Credit Points 10 **Level** 1

Assumed Knowledge

Basic biological/anatomical/physiological principles, as would be acquired in 400868 Human Anatomy & Physiology 1.

Incompatible Units

14466 - Human Biology 2, 300319 - Introduction to Human Anatomy and Histology, 300320 - Introduction to Human Physiology, 400256 - Human Medical Sciences 2, 400130 - Human Medical Sciences 1,

....

Human Anatomy and Physiology 2 systematically covers anatomy and physiology at an introductory level. This unit is designed to provide students, especially those in clinical health science programs, with an overview of body systems and their functions, to ensure a suitable basis for their future studies. The unit studies the basic structure and function of the major body systems such as cardiovascular, respiratory, digestive, urinary, reproductive and lymphatic. This unit also explores the physiological processes involved in the immune response, cell metabolism, regulation of body fluids and acid-base balance. Emphasis is placed on the interconnection and relationship between structure and function at every level of organisation.

300807.1 Human Animal Interactions

Credit Points 10 **Level** 1

Incompatible Units

300426 - Introduction to Animal Science, 300560 - Human Animal Interactions

Special Requirements

Students require lab coats, closed in work boots, long pants and long -sleeved shirt for this unit.

....

This unit introduces students to the varying relationships between humans and animals including domestication, the role of animals for companionship, as workers, the traditional role of animals in agriculture, wildlife and zoo animals and their increasingly recognised aesthetic and therapeutic roles. Students will work with a variety of domesticated animals, captive native mammals, and reptiles on-campus, and in a variety of animal industries off campus, including wildlife parks and zoos. The unit includes a balance of theoretical and practical work in the areas of behaviour and handling, basic husbandry, health care, and ethical management.

101676.2 Human Learning

Credit Points 10 **Level** 2

Special Requirements

The online version of this unit is only available to students enrolled in 1793 - Bachelor of Science, Criminology and Psychological Studies.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 367

Units

....

Human Learning is concerned with the experimental analysis of human and animal behaviour and focuses upon associative learning, including classical conditioning, operant conditioning, and social learning approaches. Definitions, assumptions, and basic phenomena associated with the study of learning are described and evaluated in terms of their ability to account for various aspects of human behaviour and experience. The practical work highlights important concepts introduced in the lecture program and focuses upon practical techniques of use in everyday situations.

401005.1   Human Relations and Life Transitions

Credit Points   10 **Level**   1

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4684 Bachelor of Midwifery. Unitrack students may study this unit as a miscellaneous unit.

....

This unit enables students to be aware of the complex nature of human relationships and life transitions and introduces relevant concepts that inform nursing and midwifery practice. The unit explores frameworks that support an understanding of human development, development of a sense of self, predictable and unpredictable transitions across the lifespan and in the context of people realising their health potential.

200740.3   Human Resource and Industrial Relations Strategy

Credit Points   10 **Level**   3

Prerequisite

200300.2 Managing People at Work

Incompatible Units

200618 - Human Resource Strategy, 200615 - Industrial Relations Strategy

....

Students in 'Human Resource and Industrial Relations Strategy' analyse the human resource and industrial relations strategies of the major employment relations stakeholders. While the principal focus is on the organisational level of analysis and on the strategic interventions introduced by management, the unit also analyses the strategic roles of government, trade unions, and employer associations. Through a range of learning activities, students examine the relationship between business strategies and HR/IR strategies, strategic HR/IR interventions, the concept of strategic choice as it concerns stakeholders and the evaluation of strategy. Students also engage with the development of human resource management and industrial relations as a professional field and consider ethics and professional standards.

200859.1   Human Resource Development

Credit Points   10 **Level**   2

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61422 - Employee Training and Development, 200610 - Employee Training and Development

....

'Human Resource Development' (HRD) looks at how the development of people and their skills is essential to the 21st century workplace. By examining the key processes of employee learning, development and career management, participants will understand HRD's impacts on workers' employability and careers, organisational effectiveness and economic sustainability. The unit introduces concepts of workplace learning and engages participants in case study discussion and research into current HRD trends in Australian and international workplaces. The goal of Human Resource Development is to support participants to ask questions about current practice and to encourage critical understanding of the field.

101988.1   Human Rights and Culture

Credit Points   10 **Level**   3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines the cultural consequences of the rise of the global human rights regime. It introduces debates about cultural relativism and universal human rights and explores a number of areas of contemporary conflict between cultural practices and human rights norms. It also examines the role of human rights NGOs in creating a new global human rights culture, and asks what it means to be a subject of human rights.

300570.3   Human-Computer Interaction

Credit Points   10 **Level**   3

Equivalent Units

300160 - Software Interface Design

....

A key component to the discipline of Information Systems is the understanding and the advocacy of the user in the development of IT applications and systems. IT graduates must develop a mind-set that recognizes the importance of users and organizational contexts. They must employ user-centered methodologies in the development, evaluation, and deployment of IT applications and systems. This unit examines human-computer interaction in order to develop and evaluate software, websites and information systems that not only look professional but are usable, functional and accessible.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 368

300901.1 Human-Computer Interaction (Advanced)

Credit Points 10 **Level** 3

Incompatible Units

300570 - Human-Computer Interaction, 300160 - Software Interface Design

Special Requirements

Students must be enrolled in 3684 Bachelor of Information and Communications Technology (Advanced), 3685 Bachelor of Computing (Information Systems) Advanced or 3688 Bachelor of Information Systems Advanced.

....

IT graduates must be able to develop and evaluate software, websites and mobile apps that not only look professional but are usable, functional and accessible. However, the study of HCI is often restricted to its use as a tool in the software development process. This advanced unit also examines HCI as a field of research and how to conduct research into human user factors. Students in this advanced unit will be required to complete a research project and produce a final research report, which is of a standard capable of being considered for publication in a HCI conference or journal.

100961.4 Humanities Internship

Credit Points 10 **Level** 3

Equivalent Units

10360 - Art History Internship, 63149 - History Internship, 100486 - Asian and International Studies Internship, 100857 - Cultural and Social Analysis Practicum

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course. The Internship unit demands that students have an in-depth understanding of the field in which the placement or project work is to be executed. This level of expertise can only be achieved by consistent study in the discipline area. Students will only be permitted to undertake the unit if a staff member has agreed to supervise them and has evaluated their proposal for a project.

....

This unit aims to provide third year humanities students with first-hand knowledge of workplaces or research processes related to their chosen field of study (major), such as art galleries, museums, libraries, local and state government, tourism and administration or in academic contexts. The unit will introduce students to various fields in which the skills developed over two years of study in humanities can be applied. It will augment their study and provide much needed work experience. The internship placement and/or project will be chosen by the student in consultation with the staff member responsible for the major area and the placement will be overseen and the academic work assessed by the member of staff responsible for the major area of study relevant to the internship.

300765.2 Hydraulics

Credit Points 10 **Level** 3

Assumed Knowledge

200238 – Mathematics for Engineers 2

Prerequisite

300762.2 Fluid Mechanics

Equivalent Units

300740 - Water Engineering, 85009 - Water Engineering

....

The unit covers the principles of open channel hydraulics, pipe hydraulics and culvert hydraulics. Specific topics in open channel hydraulics include uniform flow, resistance equations, specific energy principle, flow types, gradually varied flow and rapidly varied flow. The purpose is to enable design of efficient open channels to meet engineering requirements. In addition, principles of pipe and culvert hydraulics are introduced, enabling analysis and design of pipe networks and culverts.

300989.1 Hydrogeology

Credit Points 10 **Level** 3

Prerequisite

300762.2 Fluid Mechanics

....

This unit covers principles of hydrogeology. It contains concepts related to occurrence of groundwater, groundwater movement, groundwater hydraulics, water wells, quality of groundwater, groundwater modelling and groundwater management. The objectives of this unit are to enable students to learn the concept of groundwater and apply the learnt concepts in solving groundwater problems in engineering practice.

300136.4 I.T. Support Practicum

Credit Points 10 **Level** 3

Prerequisite

300150.3 PC Workshop AND **300138.3** LAN Workshop OR **300576.2** Networking Workshop

Special Requirements

Students must be in their final session of study and enrolled in the Bachelor of Technology (IT Support), Bachelor of Computing, Bachelor of Computer Science, Bachelor of Information Technology, Bachelor of Mathematics and Information Technology or Bachelor of Information and Communications Technology.

....

This unit provides students real-world experience in the area of Information Technology (IT) support. Students are located with industry partners in the Greater Western Sydney region in IT support positions for 10 hours per week over a 12 week period. In addition, students receive instruction and tuition in aspects of professional practice such as code of ethics.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 369

102256.1 Idea (Conceiving Experience)

Credit Points 10 **Level** 7

Equivalent Units

101834 - Idea

Special Requirements

Students must be enrolled in 1797 or 1831 Master of Arts in Literature and Creative Writing.

....

This unit will focus on a particular idea or concept that is of major importance to the diverse cultural, artistic and philosophical understandings we have of ourselves. It will then look to explore how the idea operates through these differing understandings and the problems it poses for representation. The theoretical and creative texts examined will focus both on the nature of the idea and how it might be better understood or made use of in creative practice.

401171.1 Imaging Science

Credit Points 10 **Level** 2

Equivalent Units

300376 - Digital Forensic Photography 2, 300864 - Imaging Science and Photograhic Evidence

Special Requirements

Students must supply their own grip kit (basic laboratory equipment – i.e. linear scales, blue tac, scissors, markers, etc).

....

Imaging science is a key area within the sciences. This unit explores the application of imaging science and to detect, preserve, enhance and examine scientific data. The unit focuses on; optical and digital enhancement methods that provide essential non-destructive methods of enhancing images and the analysis of the data they contain. It provides the learner with the necessary theoretical concepts of imaging science that underpin the practice of scientific evaluation mapped in 2, 3 and 4 dimensions

300847.2 Immunology

Credit Points 10 **Level** 2

Prerequisite

300936.1 Functional Proteins and Genes

Equivalent Units

300229 - Immunology

Incompatible Units

300223 - Cell Signalling and Molecular Immunology

Special Requirements

Successful completion of 60 credit points at Level 1 and 20 credit points at Level 2.

....

This unit aims to provide students with an understanding of the structure and function of the immune system, and particularly highlights common and unique systems that exist across kingdoms and phyla. A foundation is built by examining the organs and cells of the human immune system. The peculiarities associated with the immune systems of marsupials, due to their early developmental stage at birth, will also be examined. Students will also develop laboratory expertise that involves immunological principles, investigative proficiency, and science communication skills, leading to understanding the knowledge base through self-learning and group work.

102342.1 In the Realms of the Sensory: Ecologies of Word, Sound and Image

Credit Points 10 **Level** 7

....

This unit develops an awareness of the cultural, aesthetic and sensory contexts in which the communication, design and creative arts are practiced. It examines approaches to creative practice and the role that creativity and experimentation, as well as collaboration and social creativity, play in the research process. Particular attention is paid to visual, aural, and alphabetic technologies, and the form of augmented virtual realities and artefacts they create. Mimicry, novelty and improvisation, critique and speculation, 'handlability' or tacit knowledge are some of the practices and concepts studied. While the unit is designed for students engaged in creative research, it has relevance for those analysing creative works as part of their research.

101905.2 Indigenous Cultures: A Global Perspective

Credit Points 10 **Level** 3

Equivalent Units

300113 - Indigenous Tourism, 100600 - Indigenous Cultures and Tourism: A Global Perspective

Special Requirements

Successful completion of 60 credit points of study in Social Sciences.

....

Drawing on global case studies, this unit aims to introduce students to some of the pressing socio-cultural issues facing indigenous peoples around the world. The unit examines the complex relationships between globalisation, colonialism and post-colonialism and contemporary indigenous cultures and identities. It draws attention to the way in which issues of representation, cultural autonomy, cultural commodification, development and human rights play out with respect to indigenous peoples' lives. More specifically, the unit interrogates the power relations and politics central to many of these issues and examines the nature of contemporary indigenous and non-indigenous interactions, particularly in the contexts of tourism and heritage, the cultural industries, the environment, development and urbanisation.

101878.1 Indigenous Landscapes

Credit Points 10 **Level** 1

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 370

Equivalent Units

300631 - Indigenous Landscape

Special Requirements

The prerequisite will not apply to students enrolled in 3671 - Bachelor of Natural Science (Environmental Management) and 3637 -Bachelor of Natural Science or to students enrolled in the major M3050 Environmental Management.

....

Indigenous Landscapes aims to exploretraditional Indigenous Australian ways of knowing landscape. Specifically, the unit incorporates UWS generic Indigenous core curriculum content that acknowledges and values pre-colonial Australian history and land-use practices. Content includes traditional land management practices; protected area management, joint management /co-management; Native Title; Land Rights; Indigenous versus statute law; sustainable land use; cultural heritage and heritage landscapes. This unit also aims to equip students with cultural competency in order to address issues of dispossession and disadvantage brought about by the historical destruction and disruption of ecological integrity.

102316.1   Indonesian 101

Credit Points 10 **Level** 1

....

This is an introductory unit to the Indonesian language and culture, for students who commence a specialisation in Indonesian at a beginner level. The unit equips students with basic language skills, provides a general knowledge about the sociolinguistic position of Indonesian, and introduces students to the ethnic, cultural and linguistic diversity of Indonesia, with a special focus on contemporary Indonesian culture. In addition to language classes, students will be exposed to written and audiovisual materials on different social and cultural aspects of Indonesia.

102326.1   Indonesian 102

Credit Points 10 **Level** 1

....

This is the second and last introductory unit in the Indonesian Language Specialisation. The unit further develops the basic language and communication skills students acquired in Indonesian 101. The vocabulary and sentence patterns covered are expanded and the communicative situations include a relatively wider variety (e.g. family, friends and community environment). The unit focuses on four language skills (listening, speaking, reading and writing).

102319.1   Indonesian 201

Credit Points 10 **Level** 2

....

This is a level two unit in the Indonesian Specialisation. It introduces students to formal and informal registers of Indonesian and exposes them to relatively complex aspects of Indonesian grammar such as affixes. Students will study the use of spoken language mainly through participation in dialogues and discussion. More formal registers will be studied through reading and writing. Communicative settings will include fields such as health, education, and tourism.

102327.1   Indonesian 202

Credit Points 10 **Level** 2

Prerequisite

102326.1 Indonesian 102

....

This is a level two unit in the Indonesian Specialisation. It builds on language skills developed in Indonesian 201 to extend students' use of formal and informal registers of Indonesian and further develop their knowledge of Indonesian communities, cultures and religions. The unit covers the four language skills (reading, listening, speaking and writing) with a special focus on listening and speaking.

102320.1   Indonesian 301: Indonesian for Academic Purposes

Credit Points 10 **Level** 3

Assumed Knowledge

Indonesian 202 or equivalent

....

This is an advanced (Level 3) unit in the Indonesian Specialisation. It focuses on the Indonesian language styles and vocabulary appropriate for academic purposes. Students will learn formal language through reading authentic materials, engaging in open discussion, and writing on topics related to education. Students will develop their formal writing skills in Indonesian and will learn how to discuss academic subjects in a formal style. They will also develop intercultural awareness by comparing and contrasting academic styles and contexts in Australia and Indonesia.

102328.1   Indonesian 302: Indonesian for Professional Purposes

Credit Points 10 **Level** 3

Prerequisite

102327.1 Indonesian 202

....

This is an advanced (level 3) unit in the Indonesian Specialisation, which should ideally be undertaken after Indonesian 301. While it further develops students' language skills, the unit focuses on the Indonesian language styles and lexical resources appropriate for professional communication. Students will be exposed to a range of professional texts and recorded speech and engage in simulated professional interactions to enable them to communicate effectively in (formal) professional settings.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 371

102329.1   Indonesian 303: Indonesian for Business

Credit Points 10 **Level** 3

Assumed Knowledge

Indonesian 301 or equivalent

Prerequisite

102327.1 Indonesian 202

....

This is an advanced (level 3) unit in the Indonesian Specialisation, which should ideally be undertaken after Indonesian 301. The unit further develops students' Indonesian language skills by focusing on language resources appropriate for business communication. Students will be exposed to a range of business texts and recorded speech and engage in simulated business interactions or negotiations to enable them to communicate effectively in (formal) business settings.

102330.1   Indonesian 304: Contemporary Indonesia

Credit Points 10 **Level** 3

Assumed Knowledge

Indonesian 301 or equivalent

....

This is an advanced (level 3) unit in the Indonesian Specialisation, which should ideally be undertaken after Indonesian 301 and Indonesian 302. The unit further develops students' language skills and knowledge of Indonesian society by exposing them to written and audiovisual resources dealing with a number of contemporary issues in Indonesia. These include employment, economy, the media and social and religious movements. Students will also engage in basic research, class discussions and oral presentations about these topics.

102331.1   Indonesian 305: Past and Present of Indonesian

Credit Points 10 **Level** 3

Assumed Knowledge

Indonesian 301 or equivalent

....

This is an advanced (level 3) unit in the Indonesian Specialisation, which should ideally be undertaken after Indonesian 301 and Indonesian 302. The unit provides an overview of the history of the Indonesian language and its relation to the languages of neighbouring countries. Students will learn how Indonesian has developed as a standard language and how its spelling, lexicon and syntactical structures have changed over history.

102332.1   Indonesian 306: Indonesian Literature

Credit Points 10 **Level** 3

Assumed Knowledge

Indonesian 301 or equivalent

....

This is an advanced (level 3) unit in the Indonesian Specialisation, which should ideally be undertaken after Indonesian 301 and Indonesian 302. The unit introduces students to Indonesian literature through a historical review and reading and analysis of samples of literary works. Students will analyse and discuss the stylistic features of the works studied as well as the social and cultural aspects reflected in them.

300773.2   Industrial Design Project (Commencement)

Credit Points 30 **Level** 5

Assumed Knowledge

Knowledge related to the successful completion of year 3 Industrial Design or equivalent (e.g. Design & Technology) is assumed. Ability to use: E-mail, Internet Web Browser, WebCT or equivalent, Word processing program, CAD software, Workshop machinery (e.g. mill, lathe, sander, rapid prototyping machine). Knowledge and/or experience in: Referencing, Lab/Workshop O&HS, Report writing, Essay writing, Process Diary, Group work, Research Methods for Industrial Designers, Project Management, Ethical Research Approval Process.

Prerequisite

300313.3 Design Studio 4: Simulate to Innovate AND **300314.2** Designed Inquiry

Corequisite

300775.2 Industrial Experience OR **10915.2** Industrial Experience

Equivalent Units

85032 - Industrial Design Project (Commencement)

Special Requirements

Successful completion of 240 credit points. Students must be enrolled in 3503 Bachelor of Industrial Design.

....

The Industrial Design Honours Program provides students with an opportunity to apply their industrial design skills to an in-depth year long design research project. In Industrial Design Major Project (Commencement), Honours candidates develop a research plan and methodology that yield design opportunities for conceptual development and resolution (to be carried out in Industrial Design Major Project Completion). In Commencement, candidates produce a comprehensive research design (and seek ethics approval as needed), literature review, preliminary concept explorations and a detailed industrial design brief.

300774.2   Industrial Design Project (Completion)

Credit Points 40 **Level** 5

Assumed Knowledge

Knowledge related to the successful completion of year 3 Industrial Design is assumed and successful completion of Industrial Design Project Commencement and Industrial Design Project Commencement's co-requisite units.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 372

Prerequisite

300773.2 Industrial Design Project (Commencement)

Equivalent Units

85033 - Industrial Design Project (Completion)

Special Requirements

Students must be enrolled in 3503 Bachelor of Industrial Design.

....

The Industrial Design Honours Program provides students with an opportunity to apply their industrial design skills to an in-depth year long design research project. In Industrial Design Major Project (Completion), Honours candidates respond to the research findings and design brief that they produced in Autumn semester. They undertake detailed design development to resolve and communicate a final design solution, which is publicly exhibited at the end of the year. Their design and research communications present a strong argument for the final design and demonstrate the honours candidates capacity to undertake postgraduate design research and to join professional design practice.

300775.2   Industrial Experience

Credit Points 0 **Level** 3

Assumed Knowledge

Successful completion of 160 credit points in either course 3502 - Bachelor of Design and Technology or 3503 - Bachelor of Industrial Design or 3504 - Bachelor of Industrial Design Engineering.

Equivalent Units

10915 - Industrial Experience

Special Requirements

Students must be enrolled in 3502 Bachelor of Design and Technology or 3503 Bachelor of Industrial Design.

....

Students will gain real-life experience in developing new products or services within a company or organisation and be exposed to some of the decision-making processes that affect the development process of consumer products or services. This is whilst experiencing the multidisciplinary nature of the interaction of all those involved in the product development process from the conception of the idea to the introduction of a new product or service to market. Students use this opportunity to test the validity of the concepts studied in various course units to date in a real life situation and develop a sense of a company's "culture".

300741.2   Industrial Experience (Engineering)

Credit Points 0 **Level** 3

Assumed Knowledge

A broad background knowledge in the relevant Engineering discipline (ie., equivalent to that obtained after completing 3 years of the Engineering program)

Equivalent Units

81999 - Industrial Experience (Engineering)

Special Requirements

Successful completion of 240 credit points.

....

Students will undertake 12 weeks full-time (37.5 hours per week) employment (or equivalent) to obtain relevant workplace experience in Engineering under the supervision of professional engineers in one company or more.

300724.2   Industry Based Learning

Credit Points 0 **Level** 5

Equivalent Units

BG311A - Industry Based Learning

Special Requirements

Students must be enrolled in 2607 Bachelor of Construction Management.

....

Students are required to undertake 1200 hours industry based experience as required by course and professional accreditation bodies.

300128.4   Information Security

Credit Points 10 **Level** 3

Assumed Knowledge

Basic understanding of data structures, number theory and probability theory. Basic programming skills in C or java, etc.

Prerequisite

200025.2 Discrete Mathematics AND **300103.3** Data Structures and Algorithms OR **300581.4** Programming Techniques

....

This unit is concerned with the protection and privacy of information in computer systems. The focus of the course is primarily on introducing basic concepts in computer and information security and then using this knowledge as the vehicle to study the design and implementation of secure computer and network systems. This unit also provides students with practical experience with security programming. In more specific terms, the unit is intended to provide the following: Basic concepts of conventional and public key encryption; Number theory and its application in public key encryption and signatures; Protocols used in secure computer systems.

300572.2   Information Systems Deployment and Management

Credit Points 10 **Level** 3

Assumed Knowledge

A general understanding of various Information Systems in the eBusiness environment - familiarity with information system development processes

Prerequisite

300580.2 Programming Fundamentals AND **300585.2** Systems Analysis and Design

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 373

Equivalent Units

300272 - Enterprise Information Management

....

This unit provides a detailed overview of system implementation stages taking into the consideration steps necessary to place the newly developed system into production, educate consumers and system users, confirm accuracy of data needed for the system's accurate functionality and assure that all business functions that interact with the system are performing properly. In addition, this unit aims to portray how project management skills are crucial in timely production and delivery of the final product. At the completion of the successful deployment system is usually transitioned to system support and maintenance therefore the overview of the transition process is also portrayed.

300573.2   Information Systems in Context

Credit Points 10 **Level** 1

Assumed Knowledge

2 Unit Mathematics and 2 Unit English (General)

Equivalent Units

700000 - Information Systems in Context (UWSC)

Incompatible Units

200128 - Introduction to Information Systems

....

This unit aims to give students the ability to recognise and expound about business information systems with regard to type, function, and purpose, and the frameworks within which these systems are used. Topics in this unit include computing fundamentals; computer hardware and software; computers and society; use of business application packages – spreadsheets, word processing, database, graphics; organisational information systems; information systems development and acquisition; data and knowledge management; electronic commerce, internets, extranets; networking; enterprise-wide information systems; the internet and information systems security; privacy, ethics and computer crime.

700000.3   Information Systems in Context (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300573 - Information Systems in Context

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisistes: Students enrolled in 7067 Diploma in Information and Communications Technology Extended or 7083 Bachelor of Information and Communications Technology Extended (WSTC FYP) must pass 700199 Academic Communication 2 (WSTC Prep) or 700208 English for Tertiary Study 2 (WSTC Prep) or 700210 Introduction to Academic Communication 2 (WSTC Prep), and must pass 700201 Computer Studies (WSTC Prep).

....

This unit aims to give students the ability to recognise and expound about business information systems with regard to type, function, and purpose, and the frameworks within which these systems are used. Topics in this unit include computing fundamentals; computer hardware and software; computers and society; use of business application packages – spreadsheets, word processing, database, graphics; organisational information systems; information systems development and acquisition; data and knowledge management; electronic commerce, internets, extranets; networking; enterprise-wide information systems; the internet and information systems security; privacy, ethics and computer crime. A major theme of this unit is in developing an understanding of the importance of the use of information for decision making in organisations.

400286.3   Injury Prevention

Credit Points 10 **Level** 3

Prerequisite

400867.2 Approaches to Health Promotion

Special Requirements

Prior to enrolling in this unit students must have submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate. Students must also complete NSW Health Immunisations.

....

Injury Prevention is a National Health Priority. Injury is the preferred term rather than accident with its connotations of inevitability and lack of apparent cause, to allow development of inter-disciplinary prevention initiatives. A systematic scientific approach to injury research and prevention is in evidence for road and occupational safety, backed by well resourced implementation structures. Other settings/sectors include sport, recreation, falls, firearms, farm, product and water safety, which are also seeing the benefits of injury prevention principles, which include health promotion issue analysis and strategic hierarchical implementation strategies using the 4Es of education, enforcement, engineering and environment.

200919.1   Innovation and Professional Practice

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 80 credit points.

....

Innovation and Professional Practice uses design thinking to develop participants' capacity to innovate across a range of changing organisational environments and future-oriented work roles. Networking, collaboration and team work around contemporary projects will develop the attitudes and abilities characteristic of ways that professionals lead and contribute to innovation in many contexts. The unit builds on study of organisation and leadership in the Bachelor of Business, and develops participants' innovative thinking through the prism of business acumen. The unit supports work integrated

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 374

learning approaches that will enable participants to develop portfolio evidence of their professional capacity to lead and participate in sustainable business change.

301072.1 Innovation Lab

Credit Points 10 **Level** 3

Special Requirements

Students must have a minimum GPA of 5 and be enrolled in The Academy at UWS; i.e. students enrolled in the Bachelor of Applied Leadership and Critical Thinking or other advanced courses at the discretion of the Academy or the Dean.

....

This unit is designed for high-achieving students who may be enrolled in Advanced degrees or the Bachelor of Applied Leadership and Critical Thinking. Technology is rapidly changing and improving. As such, continuous innovation is essential in order to ensure applicability into the future. This unit focuses on entrepreneurship and innovation by pushing boundaries, experimenting, adapting and learning from mistakes to find new ways of approaching innovation problems. Working in state-of-the-art 'Innovation Labs', students will be empowered to design and develop innovative processes to consider problems and provide solutions for real-world challenges.

200917.1 Innovation, Enterprise and Society

Credit Points 10 **Level** 3

Special Requirements
Successful completion of 80 credit points.

....

Innovation, Enterprise and Society focuses on forces driving innovation, creativity and technical change at the levels of entrepreneurship, enterprise, economy and society. It also examines the effects of innovation at these various levels. This unit is a professional core unit in the Bachelor of Business. The unit takes a multi-disciplinary approach utilising critical thinking, debates, problem solving, policy analysis and case studies. Students will understand the professional, social, public policy and global networks and systems informing and surrounding innovation. Successful completion of the unit equips students to appreciate the entrepreneurial, political and social dimensions of innovation.

300899.1 Inorganic Chemistry

Credit Points 10 **Level** 2

Prerequisite
300800.1 Essential Chemistry 1 OR **300808.1** Introductory Chemistry

Incompatible Units
300230 - Inorganic Chemistry 2, 300545 - Coordination Chemistry

Special Requirements
Students will require laboratory coat, appropriate shoes and eye protection in this unit.

....

This unit introduces students to a thorough study of coordination chemistry (discussing complexes, ligands, structure, isomerism, stability, reaction mechanisms, oxidation states, elements in the first transition series, coordination chemistry in biological systems). The unit then moves on to areas of fundamental inorganic chemistry, including bonding, and solid state chemistry. Advanced Modules cover the following topics: spectroscopy in coordination complexes, physiology and inorganic chemistry, and medicinal inorganic chemistry. This unit also introduces many of the laboratory techniques and equipment that are used in synthetic procedures in coordination chemistry.

300075.4 Instrumentation and Measurement

Credit Points 10 **Level** 3

Prerequisite
300005.2 Circuit Theory

....

This unit covers all topics associated with the measurement of physical quantities and the instrumentation required to accurately present this information to a controller. Transducers used to measure common physical quantities are presented in detail, while instrumentation includes a detailed analysis of zero-span circuits, Wheatstone bridges, Instrumentation amplifiers, isolation amplifiers, voltage-to-current and voltage-to-frequency modules used for faithful signal transmission, digital-to-analog and analog-to-digital circuits. The application of these modules in modern measurement equipment-multimeters, digital CROs and PLC/PC interfacing modules is discussed.

400979.1 Integrated Clinical Rotations (General)

Credit Points 120 **Level** 4

Prerequisite
400810.1 Integrated Clinical Rotations 1

Incompatible Units
400811 - Integrated Clinical Rotations 2 and 400977 - Integrated Clinical Rotations 3

Special Requirements
Students must be enrolled in 4641 Bachelor of Medicine, Bachelor of Surgery. Students will have achieved all following special requirements in the preceding years of the course. 1. Criminal record check 2. Immunisations required by Health Service 3. Registration with AHPRA 4. Child protection check. NSW ClinConnect compliance.

....

Integrated Clinical Rotations (General) is a specific unit for students who have deficiencies in performance at the end of Integrated Clinical Rotations 3. The content will be tailored to each student to enable them to achieve competence in medicine. The unit will run from the middle of one year to the middle of the following year and the assessment will be held in conjunction with Integrated Clinical Rotations 3.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 375

400810.3 Integrated Clinical Rotations 1

Credit Points 80 **Level** 3

Prerequisite

400862.1 Foundations of Medicine 2

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine/ Bachelor of Surgery or 4671 Bachelor of Medicine/Bachelor of Surgery/Bachelor of Arts. Students are required to have Stethescope, Pencil Torch, Analogue Watch. Students are required to have obtained all the necessary documentation to be verified by NSW ClinConnect. This verification is a requirement of NSW Health for all students enrolled in medical programs. If a student fails to produce this documentation to ClinConnect they will be unable to attend their hospital tutorials and placements. Attendance at the hospital is a mandatory requirement of the Unit and failure to attend will result in a 'CF' (Compulsory Fail) of the unit. The documents that are to be provided to ClinConnect are: 1. National Police Certificate 2. Adult Health Immunization Schedule 3. Code of Conduct Agreement Students are also expected to meet the inherent requirements of the course as outlined in the Western Sydney University Inherent Requirements for Medicine Courses: www. westernsydneyuniversity.edu.au/ir/inherent_requirements/ inherent_requirements_for_medicine_courses . Inherent requirements are the fundamental components of a Course or Unit, that are necessary to demonstrate the capabilities, knowledge and skills essential to achieve the core learning outcomes of the Course or Unit, while preserving the academic integrity of the university's learning assessment and accreditation processes. The Disability Education Standard, Section 3.4 (3) states: "In assessing whether an adjustment to the Course, Unit of the Course or program in which the student is enrolled, or proposes to be enrolled, is reasonable, the provider is entitled to maintain the academic requirements of the Course or program, and other requirements or components that are inherent in or essential to its nature. Note: In providing for students with disabilities, a provider may continue to ensure the integrity of its Courses or programs and assessment requirements and processes, so that those on whom it confers an award can present themselves as having the appropriate knowledge, experience and expertise implicit in the holding of that particular award."

....

Integrated Clinical Rotations 1 is the first major clinical year of the MBBS program. It consists of 10 weeks each in Surgery, Medicine and Medicine in Context (MiC), and 5 weeks in Critical Care. Surgery, Medicine and Critical Care attachments will be at Campbelltown, Blacktown, Mt Druitt, Bankstown, Fairfield and Liverpool hospitals. In Surgery and Medicine students spend 5 weeks in each of two sub-specialities. In Critical Care students spend time in Emergency and Anaesthetics Departments. The 10-week MiC attachment is conducted in two 5-week blocks and involves community-based aspects of the health care system including community organisations and general practice. Students also have 3 Conference Weeks; tutorials in clinical communication skills; and undertake an assignment in Evidence-Based Medicine and 3 online Scientific Streams learning modules.

400811.2 Integrated Clinical Rotations 2

Credit Points 80 **Level** 4

Prerequisite

400810.2 Integrated Clinical Rotations 1

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine/ Bachelor of Surgery or 4671 Bachelor of Medicine/Bachelor of Surgery/Bachelor of Arts. Students will require Stethoscope, Pencil torch, Watch with a second hand or display. Students are required to have obtained all the necessary documentation to be verified by NSW ClinConnect. This verification is a requirement of NSW Health for all students enrolled in medical programs. If a student fails to produce this documentation to ClinConnect they will be unable to attend their hospital tutorials and placements. Attendance at the hospital is a mandatory requirement of the Unit and failure to attend will result in a 'CF' (Compulsory Fail) of the unit. The documents that are to be provided to ClinConnect are: 1. National Police Certificate 2. Adult Health Immunization Schedule 3. Code of Conduct Agreement Students are also expected to meet the inherent requirements of the course as outlined in the Western Sydney University Inherent Requirements for Medicine Courses: (www.westernsydney.edu.au/ir/ inherent_requirements/ inherent_requirements_for_medicine_courses). Inherent requirements are the fundamental components of a Course or Unit, that are necessary to demonstrate the capabilities, knowledge and skills essential to achieve the core learning outcomes of the Course or Unit, while preserving the academic integrity of the university's learning assessment and accreditation processes. The Disability Education Standard, Section 3.4 (3) states: "In assessing whether an adjustment to the Course, Unit of the Course or program in which the student is enrolled, or proposes to be enrolled, is reasonable, the provider is entitled to maintain the academic requirements of the Course or program, and other requirements or components that are inherent in or essential to its nature. Note: In providing for students with disabilities, a provider may continue to ensure the integrity of its Courses or programs and assessment requirements and processes, so that those on whom it confers an award can present themselves as having the appropriate knowledge, experience and expertise implicit in the holding of that particular award."

....

Integrated Clinical Rotations 2 is the second major clinical year of the MB BS program. It consists of nine weeks in each of Paediatrics, Obstetrics & Gynaecology and Psychiatry and four weeks in each of Oncology/Palliative Care and Community Research. There will also be two weeks of "Year 4 Campus Learning" which replaces the previous Conference Weeks. These will be one week each and held at either Campbelltown Campus or Blacktown Clinical School. During the year, students will be based at a number of appropriate hospitals throughout Sydney, Bathurst and Lismore. Students will also undertake three online learning modules (Scientific Streams). Students will also complete? A reflective portfolio. Slight variations in the delivery of ICR2 occur in the Rural clinical schools. Learning outcomes & assessment requirements do not differ. The rules on assessment for rural students doing

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 376

Year 4 subjects in their 5th year are the rules that applied when they were first enrolled in Year 4 in their 4th year.

400977.2 Integrated Clinical Rotations 3

Credit Points 40 **Level** 4

Prerequisite

400811.2 Integrated Clinical Rotations 2

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine/ Bachelor of Surgery or 4671 Bachelor of Medicine/Bachelor of Surgery/Bachelor of Arts. Students are required to have Stethoscope Pencil torch and Watch with a second hand or display. Students are required to have obtained all the necessary documentation to be verified by NSW ClinConnect. This verification is a requirement of NSW Health for all students enrolled in medical programs. If a student fails to produce this documentation to ClinConnect they will be unable to attend their hospital tutorials and placements. Attendance at the hospital is a mandatory requirement of the Unit and failure to attend will result in a 'CF' (Compulsory Fail) of the unit. The documents that are to be provided to ClinConnect are: 1. National Police Certificate 2. Adult Health Immunization Schedule 3. Code of Conduct Agreement Students are also expected to meet the inherent requirements of the course as outlined in the Western Sydney University Inherent Requirements for Medicine Courses: www.westernsydneyuniversity.edu.au/ir/ inherent_requirements/ inherent_requirements_for_medicine_courses . Inherent requirements are the fundamental components of a Course or Unit, that are necessary to demonstrate the capabilities, knowledge and skills essential to achieve the core learning outcomes of the Course or Unit, while preserving the academic integrity of the university's learning assessment and accreditation processes. The Disability Education Standard, Section 3.4 (3) states: "In assessing whether an adjustment to the Course, Unit of the Course or program in which the student is enrolled, or proposes to be enrolled, is reasonable, the provider is entitled to maintain the academic requirements of the Course or program, and other requirements or components that are inherent in or essential to its nature. Note: In providing for students with disabilities, a provider may continue to ensure the integrity of its Courses or programs and assessment requirements and processes, so that those on whom it confers an award can present themselves as having the appropriate knowledge, experience and expertise implicit in the holding of that particular award."

....

Integrated Clinical Rotation 3 is the first session of the third major clinical year of the MB BS program. It consists of five weeks in each Medicine, Surgery, General Practice or Indigenous Health or ICU, ED & Anaesthetics. There will also be two Conference weeks where all students will be based at either Campbelltown Campus, Macarthur Clinical School or Blacktown Clinical School. Students will be based at a number of appropriate hospitals throughout Sydney. Students will also undertake two online learning modules (Scientific Streams). Students will also undertake a reflective portfolio.

400978.2 Integrated Clinical Rotations 4

Credit Points 40 **Level** 4

Prerequisite

400977.2 Integrated Clinical Rotations 3 OR **400979.1** Integrated Clinical Rotations (General)

Special Requirements

Students must be enrolled in 4641 Bachelor of Medicine, Bachelor of Surgery or 4671 Bachelor of Medicine, Bachelor of Surgery/Bachelor of Arts. Students are required to have obtained all the necessary documentation to be verified by NSW ClinConnect. This verification is a requirement of NSW Health for all students enrolled in medical programs. If a student fails to produce this documentation to ClinConnect they will be unable to attend their hospital tutorials and placements. Attendance at the hospital is a mandatory requirement of the Unit and failure to attend will result in a 'CF' (Compulsory Fail) of the unit. The documents that are to be provided to ClinConnect are: 1. National Police Certificate 2. Adult Health Immunization Schedule 3. Code of Conduct Agreement Students are also expected to meet the inherent requirements of the course as outlined in the University of Western Sydney Inherent Requirements for Medicine Courses: (www.uws.edu.au/ir/ inherent_requirements/ inherent_requirements_for_medicine_courses). Inherent requirements are the fundamental components of a Course or Unit, that are necessary to demonstrate the capabilities, knowledge and skills essential to achieve the core learning outcomes of the Course or Unit, while preserving the academic integrity of the university's learning assessment and accreditation processes. The Disability Education Standard, Section 3.4 (3) states: "In assessing whether an adjustment to the Course, Unit of the Course or program in which the student is enrolled, or proposes to be enrolled, is reasonable, the provider is entitled to maintain the academic requirements of the Course or program, and other requirements or components that are inherent in or essential to its nature. Note: In providing for students with disabilities, a provider may continue to ensure the integrity of its Courses or programs and assessment requirements and processes, so that those on whom it confers an award can present themselves as having the appropriate knowledge, experience and expertise implicit in the holding of that particular award."

....

Integrated Clinical Rotations 4 is the final Unit in the MBBS course and consists of clinical rotations in Medicine, Surgery and two of General Practice, Indigenous Health and ICU/Emergency/Anaesthetics. Students also undertake two Scientific Streams and two Conference weeks.

300931.1 Integrated Science

Credit Points 10 **Level** 2

Equivalent Units

300661 - Integrated Science, 300664 - Science in Society, 700096 - Integrated Science (UWSC)

....

Science and the scientific process of discovery have been successful in offering explanations for the world we live in.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 377

Units

Due to scientific advances, we have eradicated some disease, explored the moon and the deepest parts of our oceans and created communication across distances on the planet previously unimaginable. We now face the major challenge of creating a future world which is sustainable for life on Earth. Solving our contemporary complex human and environmental issues to create a sustainable future, however, requires integrative and multidisciplinary research frameworks, an understanding of the relationship between science and society including cultural, social, economic and political and ethical factors. Students will critically examine such perspectives in a series of contemporary 'real-life' case studies such as climate change, indigenous health, medical breakthroughs, biodiversity loss, environmental sustainability and human-animal interactions. They will undertake research into the relationship of science integrated with society, and the uncertainty and bias of evidence in decision making. They will demonstrate their understanding by analysis of a contemporary issue by producing an eco-science advisory column.

700096.3   Integrated Science (WSTC)

Credit Points   10 **Level**   2

Assumed Knowledge

Oral and written communication skills

Equivalent Units

300661 - Integrated Science 1, 300664 - Science in Society, 300931 - Integrated Science

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Students are required to have safety glasses, laboratory coat and laboratory book.

....

Science and the scientific process of discovery have been successful in offering explanations for the world we live in. Due to scientific advances, we have eradicated some disease, explored the moon and the deepest parts of our oceans and created communication across distances on the planet previously unimaginable. We now face the major challenge of creating a future world which is sustainable for life on Earth. Solving our contemporary complex human and environmental issues to create a sustainable future, however, requires integrative and multidisciplinary research frameworks, an understanding of the relationship between science and society including cultural, social, economic and political and ethical factors. Students will critically examine such perspectives in a series of contemporary 'real-life' case studies such as climate change, indigenous health, medical breakthroughs, biodiversity loss, environmental sustainability and human-animal interactions. They will undertake research into the relationship of science integrated with society, and the uncertainty and bias of evidence in decision making. They will demonstrate their understanding by analysis of a contemporary issue by producing an eco-science advisory column.

401109.1   Integrating Research into Physiotherapy Practice

Credit Points   10 **Level**   4

Prerequisite

400865.2 Evidence-Based Practice OR **400944.1** Evidence-Based Practice (Advanced) AND **401110.1** Clinical Education B (Rehabilitation) OR **401111.1** Clinical Education C (Ambulatory Care) OR **401112.1** Clinical Education D (Paediatrics) OR **401113.1** Clinical Education E (Advanced Care)

Incompatible Units

401050 - Integrated Research into Physiotherapy Practice

Special Requirements

Students must be enrolled in 4706 Bachelor of Physiotherapy

....

In this unit, students will further develop their evidence based practice skills and knowledge by applying it in practice settings. This will involve applying the academic knowledge and skills from three prior evidence based practice and research units by synthesising it with client goals and values, and experience gained during an advanced level clinical placement. Students will be allocated a topic area from which they will identify a clinical "problem" or health-related issue. Students will then plan and execute a clinical evidence based research investigation. This will involve the formulation of a clinical question, identification and appraisal of best available research evidence, and synthesis of this information to develop a client-group specific, evidence-based management strategy. Students will be expected to reflect on the barriers and facilitators of evidence based practice, and present the outcomes of their research at a student conference. This unit also involves students developing leadership skills by facilitating and participating in a journal club.

300368.2   Intelligent Systems

Credit Points   10 **Level**   3

Assumed Knowledge

Basic understanding of data structures and algorithms and basic programming skills in Pascal C/C++ or Java etc.

Prerequisite

200025.2 Discrete Mathematics

Equivalent Units

300087 - Artificial Intelligence, 300137 - Knowledge Based Systems

....

This unit provides basic studies in the major areas of artificial intelligence: search, knowledge representation, logic programming, machine learning and knowledge based systems, agent planning and learning. The first part of this unit will focus on the foundation of artificial intelligence: search algorithms and their implementations, game playing, logics and knowledge representation, and inference in reasoning systems. The second part will cover

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 378

the principles of knowledge based systems (intelligent systems), planning, and machine learning.

101950.1 Intercultural Communication

Credit Points 10 **Level** 3

Equivalent Units

101454 - Intercultural Pragmatics

....

This unit aims to develop the communicative competence of students in intercultural contexts and raise their awareness of issues in the use of languages. It helps the students understand hidden socio-cultural dimensions and equips them with the knowledge and skills necessary for intercultural communication. It also prepares them to critically analyse linguistic and cultural differences around them, apreciate linguistic and cultural diversity, and integrate the unit contents into their future careers. The impact of intercultural communication is highlighted in a range of real-life sectors, such as second language teaching and learning, translation and interpreting services, international business, tourism, community services, and organisational communication. Lectures will be delivered in English and depending on demand, language-specific tutorials will be delivered in Arabic, Chinese, Indonesian and Japanese as well as English.

101454.2 Intercultural Pragmatics

Credit Points 10 **Level** 3

Assumed Knowledge

In addition to appropriate competence in English, students are expected to have equivalent Level 2 knowledge of one of the following languages: Arabic, Japanese, Chinese, Spanish, Italian.

....

In 2013, this unit replaced by 101950 - Intercultural Communication. This is an optional level 3 core unit for the major in Arabic, Japanese, Chinese, Spanish, and Italian, within the BA Languages Key Program. It also constitutes part of the linguistics major and sub-major. It can also be taken as an elective. This is a language-specific unit intended to develop the students' awareness of language usage issues which may have an impact on intercultural communication and, therefore, on cultural stereotyping as well as other real life interests, such as business relationships and professional performance. It covers issues such as the relationship between culture and language use, ingroup-outgroup relationships, speech acts across cultures, politeness in text and discourse, miscommunication and stereotyping.

200536.3 Intermediate Financial Accounting

Credit Points 10 **Level** 2

Assumed Knowledge

Sufficient grasp of introductory accounting to competently prepare external financial statements.

Prerequisite

200111.2 Financial Accounting Applications

Equivalent Units

200112 - Financial Accounting Issues, 61112 - The Anatomy of Financial Accounting

Incompatible Units

AC304A - Advanced Financial Accounting, H3327 - Financial Accounting 3

....

This unit extends the knowledge and understanding of financial accounting through the application of problem solving to selected entities drawing upon accounting theory and critical analysis.

200590.2 International Business Project

Credit Points 10 **Level** 3

Assumed Knowledge

This is a capstone International Business unit. It is assumed that students have basic international business knowledge and research skills.

Prerequisite

200591.2 Introduction to International Business

Equivalent Units

61125 - International Business Project 1

....

This is a capstone unit in International Business. The aim of the unit is to give students a real-life action learning project in which they undertake an international business strategic planning and analysis exercise for a client organisation. This project usually involves students working in small teams for a client organisation under the direct supervision of the lecturer.

200626.2 International Business Strategy

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of the basic principles of marketing and international business.

Prerequisite

200083.2 Marketing Principles OR **200591.2** Introduction to International Business

Equivalent Units

61119 - International Business Strategy

....

In an environment where operating internationally is becoming the norm rather than the exception, firms are faced with ever increasing complexity when formulating their business strategy. This requires an understanding of how firms become and remain international, the basic modes of international involvement, the practice of multinational management and how firms can establish a balance between the sometimes conflicting demands of headquarters, the subsidiary and the governments of all the countries where the multinational enterprise operates. This unit will cover these issues and will deal with both large and small companies that must be global to survive.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 379

200907.1 International Environmental Law and Policy

Credit Points 10 **Level** 7

Assumed Knowledge

Bachelor of Laws or equivalent qualification.

Special Requirements

Students must be enrolled in 8083 Bachelor of Research Studies/Master of Research or 8084/8085 Master of Research.

....

This unit provides an overview of international environmental law and policy. It investigates legal and policy measures for managing and protecting the environment in a sustainable manner. The unit will begin by exploring the economic, political, and legal concepts relevant to international environmental legal regimes. It will then apply these concepts to concrete regimes designed to deal with specific international environmental problems, such as climate change, ozone depletion, air pollution, hazardous waste, freshwater resources, marine pollution, world heritage, human rights, biodiversity and habitat loss. The unit focuses principally on the dynamic of treaties, negotiations, and state and non-state actors in the international arena. Special attention will be given to 21st Century environmental problems. Appropriateness of the present environmental legal regimes and challenges for the future will also be mooted in the unit.

200055.5 International Finance

Credit Points 10 **Level** 3

Prerequisite

200488.3 Corporate Financial Management

....

The study of international finance from the vantage point of a multinational enterprise provides students with a global insight into international trade for both manufactured and financial products. The unit recognises the increasing importance of global integration of money and capital markets - a trend that is creating expanded opportunities for both investors and organisations that need to raise capital. The recognition and management of risks associated with international operations are explored including cost of capital and financial structure, international financial markets crisis, international financial management, international monetary system, international diversification, foreign exchange risk management including the use of futures and options, foreign investment analysis, determination of exchange rates, balance of payments analysis, international debt crisis and country risk analysis.

200621.3 International Human Resource Management

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61472 - International Human Resource Management

....

'International Human Resource Management' examines the implications for human resource management that arise from the internationalisation of organisations. Through portfolio reports and case studies, students analyse a range of comparative systems and structures of employment relations and the strategic management of global organisations. This analysis includes a focus on key human resource functions including recruitment, training, reward and evaluation of the impact of society, politics, economics and culture of host countries on human resource strategies. Students examine also the role of global stakeholders and assess the implications for human rights that arise from globalisation.

200094.4 International Marketing

Credit Points 10 **Level** 3

Assumed Knowledge

Students should have a good understanding of marketing research, brand management and the foundations of economics.

Prerequisite

200083.2 Marketing Principles OR **200591.2** Introduction to International Business

....

Marketing internationally has become a necessity for many firms that wish to survive and grow in today's dynamic and increasingly linked world economy. International Marketing is concerned with understanding and successfully managing the different international economic, cultural, political and legal environments as they affect the marketing activities of companies. International Marketing examines the role of marketing research, international finance, overseas market entry and expansion strategies and the marketing mix in international markets. On completion of this unit students will have acquired a sound theoretical basis and, particularly, a practical understanding of how companies operate in international markets.

102189.1 International Organisations and Global Governance

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit addresses the competing concepts inherent in global governance through an examination of the existing international society of states whose principle is based on respect for state sovereignty. It also addresses the complex process of global governance in which states, non-governmental organisations, multinational corporations, and intergovernmental organisations participate and pursue their goals. It will specifically look at the complex role of the United Nations, the United Nations Security Council, and the role of international organisations aimed at addressing issues, such as security, human rights, humanitarian intervention, trade, the environment, health, migration, and labour rights.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 380

102190.1 International Relations of Southeast Asia

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit focuses on the key international relations issues and challenges facing the Southeast Asian region in the 21st century. Commencing with the historical issues that have shaped the nations of Southeast Asia it will then consider the issues, such as the war on terrorism; the economic demands of globalism; maritime security; and social and political demands centred around issues such as democracy, human rights, the environment, and transnational crime. Finally, it will consider the shifting power structure within the Asian region and whether this will result in Southeast Asia gaining genuine autonomy and the impact this has on regionalism.

102193.1 International Special Study

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit provides students with opportunities outside the usual classroom experience. It is designed particularly for students who (1) enrol in short-course study tours, and/or (2) who take a placement within an international workplace. Several UWS partner institutions (e.g., the University of Seoul) run annual short-course study programs. With regard to placements (internships), students must seek a placement that connects directly with their areas of study.

101986.1 International Texts and Contexts

Credit Points 10 **Level** 2

Equivalent Units

100871 - International Texts and Contexts

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit investigates social and political discourses of a selection of literary (the novel, poetry, memoir) and cultural texts that highlight aspirations, ideals, struggles and tragedies of national and global significance. It will explore concepts and manifestations of self, nation, community, empire, culture and art through a study of textual constructions of the individual's negotiation of interacting and often competing ideologies. A range of written and visual texts will be used.

300130.3 Internet Programming

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge on internet browsing and any object-oriented programming language.

Prerequisite

300147.3 Object Oriented Programming OR **300581.2** Programming Techniques OR **300027.2** Engineering Computing

Equivalent Units

300246 - Internet Computing

....

This unit offers students basic concepts and latest technologies of internet programming and web-based application development. Utilising one of the popular internet programming languages, such as Java, it aims to develop the programming skills and methodologies required for both client-side and server-side programming as well as general purpose programming. The range of topics covered by the unit includes HTML, XML, Java applets, desktop application in Java, servlets, JavaServer Pages and JDBC.

300574.2 Internet Structures and Web Servers

Credit Points 10 **Level** 2

Assumed Knowledge

Fundamentals of computer networking and basic knowledge of web technology

....

This unit seeks to develop an understanding of the structures of the Internet and the organization of the World Wide Web, and the basic skills in setting-up and maintaining Web servers, proxy servers, email servers, and Internet firewalls.

102212.1 Internship and Community Engagement

Credit Points 10 **Level** 2

Special Requirements

Students must be enrolled in The Academy @ UWS or at the discretion of the Director of Academic Program and/or Head of The Academy and must have completed 40 credit points of study. In some cases, some of the students' projects will comprise working with vulnerable populations, and in some cases may need to undertake Child Protection course/background checks, First aid etc. This will depend on the Internship/Engagement undertaken.

....

The aim of this unit is to provide second/third year Academy students with an opportunity to develop professional identity through exposure to workplaces, community settings or research processes related to their chosen field of study. Students will be encouraged to identify, examine and discuss the multiplicity of leadership factors in such environments while providing work

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 381

experience. This is a cross-disciplinary unit that will employ experiential learning to achieve the learning outcomes. This placement will be chosen by the student in consultation with staff of The Academy and will be undertaken either as an individual or part of a project team.

800176.1 Internship and Community Engagement (PG)

Credit Points 10 **Level** 7

Special Requirements

Students must be enrolled in 8083 Bachelor of Research Studies/Master of Research, 8084 Master of Research (High Cost) or 8085 Master of Research (Low Cost) in order to enrol in this unit.

....

The aim of this unit is to provide Master of Research students with an opportunity to develop professional identity through exposure to workplaces, community settings or research processes related to their chosen field of study. Students will be encouraged to identify, examine and discuss the multiplicity of leadership factors in such environments while providing work experience. This is a cross-disciplinary unit that will employ experiential learning to achieve the learning outcomes. This placement will be chosen by the student in consultation with staff of Graduate Research School and will be undertaken either as an individual or part of a project team.

700209.2 Introduction to Academic Communication 1 (WSTC Prep)

Credit Points 10 **Level** Z

Equivalent Units

700207 - English for Tertiary Study 1 (UWSCFS); 700198 - Academic Communication 1 (UWSCFS); 900074 - Academic English 1 (UWSC); 900102 - English for Tertiary Study 1 (UWSC); 900107 - Introduction to Academic Communication 1 (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Available to Open Access students.

....

This unit is designed to introduce students to academic culture as a culture of critical debate and equip students with the academic literacy skills necessary to perform successfully in this culture. In particular, the unit aims to help students access the conventions of academic English by focussing on attitudes to knowledge, and the ways in which ideas are structured and presented in academic texts and speech. The unit assists students to comprehend academic texts, identify key ideas and concepts, and identify and use the rhetorical moves used in academic texts. It also aims to help students compare and contrast ideas across texts, improve grammatical skills that relate to academic writing, summarise and synthesise information, and understand why, when and how to reference information.

700210.2 Introduction to Academic Communication 2 (WSTC Prep)

Credit Points 10 **Level** Z

Prerequisite

700209.1 Introduction to Academic Communication 1 (UWSCFS)

Equivalent Units

700208 - English for Tertiary Study 2 (UWSCFS); 700199 - Academic Communication 2 (UWSCFS); 900075 - Academic English 2 (UWSC); 900103 - English for Tertiary Study 2 (UWSC); 900108 - Introduction to Academic Communication 2 (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Available to open access students.

....

This unit is designed to expand upon and extend the academic literacy skills acquired in Introduction to Academic Communication 1. The unit will assist students to critically read and analyse a variety of texts, and to develop their research and writing skills to produce complex texts. There is a particular focus in this unit on critique and analysis in the process of understanding and producing academic texts.

300825.2 Introduction to Anatomy

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Biology

Equivalent Units

300319 - Introduction to Anatomy and Histology, 300752 - Introduction to Anatomy and Histology, 300778 - Introduction to Anatomy, 700097 - Introduction to Anatomy (UWSC)

Incompatible Units

300361 - Introduction to Human Biology, 400130 - Human Medical Sciences 1, 400256 - Human Medical Sciences 2, 400134 - Human Medical Sciences 3, 400868 - Human Anatomy & Physiology 1, 400869 - Human Anatomy & Physiology 2

Special Requirements

Due to space and resource limitations, this unit will be restricted to students enrolled in 3673 Bachelor of Medical Science and 3682 Bachelor of Medical Science (Advanced), 3562 - Bachelor of Science (Advanced Science), 3589 - Bachelor of Science (Forensic Science)

....

This unit provides a basic understanding of human anatomy. It undertakes this by utilising a systems approach (in contrast to a regional approach), emphasising the special relationship between form and function.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 382

700097.2   Introduction to Anatomy (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Biology

Equivalent Units

300778 - Introduction to Anatomy, 300825 - Introduction to Anatomy

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit provides a basic understanding of human anatomy. It undertakes this by utilising a systems approach (in contrast to a regional approach), emphasising the special relationship between form and function.

700004.3   Introduction to Business Law (WSTC)

Credit Points 10 **Level** 1

Corequisite

700216.1 Introduction to the Australian Legal System (UWSCFS)

Equivalent Units

200184 - Introduction to Business Law, 700254 - Enterprise Law (WSTC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. The co-requisite unit 700216 - Introduction to the Australian Legal System (UWSCFS) applies to students in the following courses: 7059 Diploma in Business and Commerce Extended, 7063 Diploma in Business and Commerce, 7064 Bachelor of Business and Commerce (UWSC First Year Program), 7071 Bachelor of Business and Commerce Extended (UWSC First Year Program).

....

In 2016, this unit replaced by 700254 - Enterprise Law (WSTC). This is an introductory law unit designed to place the fundamentals of law in a commercial context. The unit introduces students to the basic principles of law and the legal system as well as examining some of the major areas of law that impact on commercial dealings. This unit examines the structure of the legal system, the way law is made, and the main areas of law relevant to starting and running a business including contracts, torts and consumer protection.

401173.1   Introduction to Clinical Epidemiology

Credit Points 10 **Level** 7

Assumed Knowledge

A background in health care is desirable

Special Requirements

Must be enrolled in a post-graduate course

....

This unit aims to impart the principles of population based (epidemiologic) evidence to the understanding of variations in the outcome of illness and the reasons thereof (Clinical Epidemiology) thereby providing the framework for finding the best answers to "real world" questions about clinical practice and health care. Individuals taking this course (who usually have a health care background) acquire the basic skills required to understand the fundamental questions about the effectiveness of clinical therapies, usefulness of screening and diagnostic tools, prognosis and disease causation and gain the skills required of effective EBM practitioners.

301071.1   Introduction to Critical Thinking

Credit Points 10 **Level** 1

Special Requirements

Students must have a minimum GPA of 5 and be enrolled in The Academy at UWS; i.e. students enrolled in the Bachelor of Applied Leadership and Critical Thinking or other advanced courses at the discretion of the Academy or the Dean.

....

This unit is designed for high-achieving students who may be enrolled in Advanced degrees or the Bachelor of Applied Leadership and Critical Thinking. This unit provides students with an opportunity to understand and develop high-level critical thinking skills; skills that are essential for success in occupations now and in the future. Students will engage with theoretical frameworks and concepts using an interdisciplinary approach, inspiring students to think and act outside the silos of their disciplines. Throughout the unit, students will consider how they think as opposed to how they think they think (biases and heuristics). They will also develop an understanding of the importance of critical thinking and ways to suppress a tendency to rationalise.

301033.1   Introduction to Data Science

Credit Points 10 **Level** 2

Assumed Knowledge

Computer Programming.

Special Requirements

Co-requisite Unit: 301108 Thinking About Data for students enrolled in 3734 Bachelor of Data Science. Pre-requisite Unit: 300700 Statistical Decision Making or 200263 Biometry or 200032 Statistics for Business for students not enrolled in 3734 Bachelor of Data Science.

....

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 383

Analysis of data is essential for scientific investigation, modelling processes and predicting future events. Data Science is the investigation of the tools required that allow us to perform this modelling and prediction. The increase in accessible data over the past few decades has promoted the use of Data Science, making it a desired skill in many professions. In this unit we further investigate the methods of regression, clustering and classification that form the basis of a data scientist's toolbox.

200052.5   Introduction to Economic Methods

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics or equivalent

Equivalent Units

61301 - Introduction to Economic Methods, 200032 - Statistics for Business, 300700 - Statistical Decision Making, 700041 - Statistical Decision Making (UWSC)

Special Requirements

Co-requisite unit 200336 - Business Academic Skills applies to students enrolled in courses 2739/2753 Bachelor of Business and Commerce, 2741/2754 Bachelor of Business and Commerce (Advanced Business Leadership) or 2740 Bachelor of Business and Commerce/Bachelor of Laws.

....

Introduction to Economic Methods will cover basic concepts in Mathematics and Statistics to help their understanding of subjects like accounting, management, marketing, finance, and economics. In addition, the analytical techniques, concepts and models that will be discussed in this unit will play a foundation role in a Business degree. Topics include: Differential calculus and its application in business and economics; collection, analysis and interpretation of data using simple descriptive and inferential statistical methods; probability distributions, point and interval estimation, hypothesis testing, and an introduction to regression analysis.

300964.1   Introduction to Engineering Practice

Credit Points 10 **Level** 1

Equivalent Units

300461 Engineering and Industrial Design Practice, 300034 Introduction to Professional Practice, 300674 Engineering Design and Construction Practice, 700038 Engineering Design and Construction Practice, 700107 Engineering, Design and Construction Practice, 700148 and 700149 Introduction to Engineering Practice.

Special Requirements

Drawing software such as AutoCAD or Solid Works

....

This unit encourages students to explore the professional responsibilities and challenges faced by Engineers. Students are introduced to emerging issues and approaches in the engineering profession, with particular attention given to using a systems approach to solve engineering problems. Students engage in a semester-long research and problem solving task that addresses technical, environmental and social sustainability imperatives and fosters fundamental research, communication skills. Special emphasis is placed on lifelong learning, academic literacy and professional skills including information literacy, project management, engineering drawing and teamwork which equip students for subsequent academic and professional pursuits.

700148.2   Introduction to Engineering Practice (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300674 Engineering Design and Construction Practice, 300964 Introduction to Engineering Practice, 700038 Engineering Design and Construction Practice, 700107 Engineering Design and Construction Practice, 700149 Introduction to Engineering Practice

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit encourages students to explore the professional responsibilities and challenges faced by Engineers. Students are introduced to emerging issues and approaches in engineering profession, especially particular attention will be given to systems approach. Students engage in a term-long research and problem solving task that addresses technical, environmental and social sustainability imperatives and fosters fundamental research, communication skills. Special emphasis is placed on lifelong learning, academic literacy and professional skills including information literacy, project management, engineering drawing and teamwork which equip students for subsequent academic and professional contexts.

401076.1   Introduction to Epidemiology

Credit Points 10 **Level** 7

Special Requirements

Students must be enrolled in a postgraduate course

....

Epidemiology is the study of the distribution and determinants of disease and other health-related conditions in populations, and the application of this study to the control of health problems. Epidemiology encompasses a broad range of activities fundamental to the health sciences. The course is aimed to equip students with the ability to understand and critically appraise evidence from the health sciences used in the formulation of clinical interventions, assessments of population disease burden, and development of health policy. Students will be taught the fundamental concepts and principles of epidemiology and will be given the opportunities through exercises and tutorials to apply these concepts and principles to case studies from current epidemiological research and practice.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 384

100964.3   Introduction to Film Studies

Credit Points 10 **Level** 2

Equivalent Units

VP212A - Introduction to Film Studies.

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

The unit will introduce students to the key theoretical strands of film studies and key concepts in the analysis of film. The unit will explore techniques of narrative, performance, genre, realism and spectatorship, as well as introducing methods to analyse the use of editing, cinematography and sound. A case study of several key historical film movements or genres will introduce students to the study of cinema in its cultural contexts. The unit will also address the transformations in screen cultures as a result of digital technologies and new media.

300566.2   Introduction to Health Informatics

Credit Points 10 **Level** 2

Assumed Knowledge

Familiarity with use of common business software, eg word proceesing, spreadsheets, database.

....

This introductory unit aims to give the student an insight into the key knowledge and skill set required in the emerging domain of Health Informatics. Critical topics include: The Australian healthcare system, health care improvement modelling, health information systems and management, paper-based v's electronic health records, clinical documentation and data quality, health information management, consumer information security, privacy and ethics, decision support and clinical delivery support systems, healthcare data representation and interchange standards, telehealth and Information Communication technologies (ICT). This will be complemented by practical exercises and assessment support sessions. Through these experiences students will gain an understanding of the application of ICT to the healthcare domain and the skills necessary to play a pivotal role in the design and delivery of healthcare systems and health information management.

700258.1   Introduction to Health Informatics (WSTC)

Credit Points 10 **Level** 2

Equivalent Units

300566 - Introduction to Health Informatics

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in the Extended Diploma courses must have passed 40 credit points in order to enrol in this unit.

....

This introductory unit aims to give the student an insight into the key knowledge and skill set required in the emerging domain of Health Informatics. Critical topics include: The Australian healthcare system, health care improvement modelling, health information systems and management, paper-based v's electronic health records, clinical documentation and data quality, health information management, consumer information security, privacy and ethics, decision support and clinical delivery support systems, healthcare data representation and interchange standards, telehealth and ICT technologies. This will be complemented by practical exercises and assessment support sessions. Through these experiences students will gain an understanding of the application of ICT to the healthcare domain and the skills necessary to play a pivotal role in the design and delivery of healthcare systems and health information management.

300361.3   Introduction to Human Biology

Credit Points 10 **Level** 1

Equivalent Units

400130 - Human Medical Sciences 1, 25009 - Physical and Biological Sciences 1, E1231 - Human Biology 1, 700061 - Introduction to Human Biology (UWSC)

Incompatible Units

300825 - Introduction to Anatomy, 300818 - Introduction to Physiology

Special Requirements

Closed footwear is required in the workshops.

....

NOTE: The ONLINE offering is currently only available to students in the Public Health Key program. This unit gives a basic understanding of the human body and introduces the scientific and medical terminology used for anatomy, physiology and biochemistry. It deals with gross structure and microscopic structure of the human body. It also examines microbial organisms, their classification, how they differ from eukaryotic cells and how our body defends against them. Where appropriate, examples of functional diseases will be discussed.

700061.3   Introduction to Human Biology (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300361 - Introduction to Human Biology

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Prerequisites: Students must pass 700190 - Fundamentals of Health Science (WSTC Prep) prior to enrolling in this unit (except for those enrolled in 7019 - Diploma in Health Science Fast Track or 7093 - Bachelor of Health Science Fast Track (WSTC First Year Program) as 700190 is not in the Fast Track course structure).

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 385

This unit gives a basic understanding of the human body and introduces the scientific and medical terminology used for anatomy, physiology and biochemistry. It deals with gross structure and microscopic structure of the human body. It also examines microbial organisms, their classification, how they differ from eukaryotic cells and how our body defends against them. Where appropriate, examples of functional diseases will be discussed.

301030.1   Introduction to Industrial Design Methods

Credit Points 10 **Level** 1

Equivalent Units

300034 Introduction to Professional Practice; 300461 Engineering & Industrial Design Practice; 300674 Engineering, Design & Construction Practice; 700038 Engineering, Design & Construction Practice; 700107 Engineering, Design & Construction Practice

....

This unit encourages students to explore the professional responsibilities and challenges faced by design professionals. Students will be introduced to design literacies, enquiry methods, skills and theories, in the course of project work to address contextualised design problem. The project tasks will deal with emerging issues and approaches to sustainability, and will demonstrate the complex nature of design problems encountered in professional practice. The unit introduces methods for research about design, for design and through design. Special emphasis is placed on lifelong learning, academic literacy and professional skills including information literacy, project management, and teamwork which equip students for subsequent academic and professional contexts.

300134.2   Introduction to Information Technology

Credit Points 10 **Level** 1

Equivalent Units

B1582 - Introduction to Computers, J1742 - Computer Fundamentals, 61211 - Information Technology

Special Requirements

Permission required for students enrolled in 3562 Bachelor of Science (Advanced).

....

This introductory unit gives students an insight into the history, structure, operations and uses of computers, and their impact on society. This will be complemented by hands-on use of computers and popular application software packages in a graphical user interface environment. Students gain a basic understanding of the uses of computers, and the skills necessary to use popular applications software, including word processing, spreadsheet and database packages, and Internet tools and services.

200591.2   Introduction to International Business

Credit Points 10 **Level** 1

Equivalent Units

61128 - International Business and Asian Environment

....

This unit introduces students to the nature of international business operations in the world economy. The first part focuses on the basic concepts and theories of international trade, investment, and foreign exchange which form the foundation of a firm's international business activities. The second part is devoted to the economic, cultural, political and ethical environments and their effects on a firm's international business operations. The third and last part provides an overview of how the functional areas of business i.e. Marketing, production, human resource and finance are conducted in and affected by the multifaceted environment of an internationally oriented firm.

101956.1   Introduction to International Relations

Credit Points 10 **Level** 1

....

This is a foundation unit for the major in International Relations and Asian Studies. As such, this unit will introduce students to key topics and debates in the field of International Relations (IR). The unit will familiarise students with leading IR theories and their explanation of political events, phenomena, and processes which cross the territorial boundaries of the state. Students will be exposed to the interplay between power, interest, ideas, identity, and resistance, in explaining continuity and change in international relations. The unit is designed to provide students with the analytical tools and intellectual frameworks needed to understand the behaviour of different international actors in contemporary global affairs.

200006.2   Introduction to Law

Credit Points 10 **Level** 1

Equivalent Units

69021 - Legal Method and Research, F1001 - Introduction to Law, LW105A - Introduction to Law

....

This unit introduces students to the Australian legal system. It considers the historical and legal factors which influenced its development and the key institutions and processes which have resulted. It considers the impact of Australian law and legal system on Aboriginal and Torres Strait Islander peoples and their laws. The unit introduces students to legal methods: legal reasoning and statutory interpretation. Students will also develop academic literacies, including study management, writing and referencing in a legal context.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 386

400244.2 Introduction to Leisure and Recreation Theory

Credit Points 10 **Level** 1

....

This unit lays a foundation for the Bachelor degree in Recreational Therapy. It introduces students to key concepts in leisure and recreation in relation to health. Students will learn about models and theories that assist them in understanding leisure behaviours and recreation practice from both psychological and sociological perspectives. Students will also explore current trends, best practice and future implications for leisure.

101945.2 Introduction to Linguistics

Credit Points 10 **Level** 1

Equivalent Units

100928 - Linguistics

....

Language is an integral component of human experience. This unit is designed to raise students' awareness of the nature, structures and functions of language and language use. Students will gain the conceptual tools to do basic analysis of language at the levels of phonology, morphology, syntax, semantics and pragmatics. By providing a basic understanding and appreciation of language from different perspectives, the unit establishes points of contact between language, the humanities, and beyond.

101907.1 Introduction to Literary Studies

Credit Points 10 **Level** 1

Equivalent Units

100862 - English, Text and Writing

....

This unit involves the close reading of literary texts to explore concepts about meaning-making including the use of language, narrative form, and issues of genre. The unit asks questions about the role and function of literature. For example: is literature's purpose to entertain readers, to provide them with emotional release, to represent the world, or to allow people to make meaning from their experience? The primary texts span three genres - fiction, poetry and drama. Students will learn about the different ways in which these literary forms are constructed and the contrasting ways in which they represent reality.

401045.1 Introduction to Midwifery Practice Experience

Credit Points 10 **Level** 1

Corequisite

401030.1 Midwifery Knowledge 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students are required to have calculator, UWS Midwifery Uniform for Clinical Placement and final skill assessment, and a watch with a second hand. Access to a computer and the internet is essential in order to be able to: access course materials; to participate in discussion groups; and to access additional resources provided by the lecturer during the session

....

In this unit students will learn the necessary midwifery skills for the provision of woman-centred antenatal care. In a simulated practice environment students will gain practical skills to provide midwifery care to the woman and her supportive others during pregnancy. This unit will also focus on preparing students for clinical placement. The importance of work health and safety and effective communication and documentation will be reinforced. This unit will include recruitment of women for the continuity of care experience.

400160.4 Introduction to Occupational Therapy

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4663 Bachelor of Health Science/Master of Occupational Therapy or 4711 Bachelor of Occupational Therapy. If students are visiting a NSW Health facility they will need to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy.

....

This unit introduces students to the profession of occupational therapy, conceptual foundations underpinning the profession, and areas of clinical practice. Students will learn about the important and unique contribution made by occupational therapists in peoples lives to promote health and well-being. The important role of occupation in daily life will be discussed. In particular, this unit presents an overview of how occupational therapy reduces activity limitations people may have, and in doing so enhances the social participation for people of all ages and abilities. The problem solving process used by occupational therapists to assist clients will be introduced.

401066.1 Introduction to Paramedicine

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4669 Bachelor of Health Science (Paramedicine).

....

This unit introduces students to the paramedic profession and its scope of practice in Australia. It includes exploration of the roles and responsibilities of paramedics in the context of the changing health environment. Ethical issues and relevant legal and regulatory requirements will also be discussed. Students will be introduced to the key concepts of paramedicine and to the complexity of normal development and its relationship to the processes of health science. Students will begin an electronic portfolio to assist them in making connections across their learning experiences while building critical and reflective skills.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 387

101918.1 Introduction to Philosophy

Credit Points 10 **Level** 1

....

This unit is an introduction to Western philosophical inquiry: it looks at fundamental questions we have about the way we think of the world around us, and the way we act. It presupposes no prior knowledge of philosophy. We will examine philosophical issues by looking at classic statements from the philosophical tradition. The unit will also help students to develop their skills in writing clear arguments. After completion of the unit students will have a critical understanding of some of the fundamental ideas that shape our thinking and our world.

300818.1 Introduction to Physiology

Credit Points 10 **Level** 1

Equivalent Units

300753 - Introduction to Human Physiology, 300620 - Physiology 1, 700098 - Introduction to Physiology (UWSC)

Incompatible Units

300361 - Introduction to Human Biology

....

This unit introduces the concept of homeostasis and critically examines examples of how the body systems are regulated and homeostatically controlled. The unit uses a body-systems approach to examine the physiology of tissues, organs and systems in order to develop an integrated view of the regulated functioning of the human body.

700098.2 Introduction to Physiology (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300753 - Introduction to Human Physiology, 300620 - Physiology 1, 300818 - Introduction to Physiology

Incompatible Units

300361 - Introduction to Human Biology, 700061 - Introduction to Human Biology (WSTC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit introduces the concept of homeostasis and critically examines examples of how the body systems are regulated and homeostatically controlled. The unit uses a body-systems approach to examine the physiology of tissues, organs and systems in order to develop an integrated view of the regulated functioning of the human body.

400906.2 Introduction to Physiotherapy Practice

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy.

....

This unit introduces students to the concept of physiotherapy as a profession, including regulatory, ethical and legal frameworks underpinning practice within the context of the changing health environment. In addition, students will be introduced to fundamental aspects of physiotherapy practice, including gathering, analysing and problem-solving information through a process of clinical reasoning. Students will also develop practical skills in relation to assessment of movement, patient manual handling and transfers, and patient education regarding gait and use of assistive devices.

400905.2 Introduction to Podiatry

Credit Points 10 **Level** 1

Special Requirements

Podiatry specific - students will be participating in podiatry related knowledge and skills that apply to podiatric practice units and designed to be an integrated part of the suite of units where one unit builds upon the competencies that complement units in Year 2, 3 and 4.

....

The broad aim of this unit is to introduce the work of podiatrists in health care and explain the important role of podiatric services in the community. Students will develop basic skills in dealing with professional, legislative and health issues. The focus will primarily be on areas designed to prepare students for incorporating the clinical standards for infection control and general clinical assessment skills in preparation for competent and safe practice in clinical units.

300733.2 Introduction to Structural Engineering

Credit Points 10 **Level** 2

Prerequisite

300040.2 Mechanics of Materials

Equivalent Units

85006 - Introduction to Structural Engineering, 700115 - Introduction to Structural Engineering (UWSC Assoc Deg)

....

This unit covers the basic concepts in analysing and designing simple structural members. It consists of the fundamentals of structural analysis, concrete structures and steel structures

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 388

102186.1   Introduction to Stylistics

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The focus of this online unit is the language of literature and the craft of writing. The unit explores the rhetorical or figurative dimension of language across literary and non-literary texts. Students analyse a range of short texts - mostly passages from novels and poems - with an eye to the formal basis of their effects. Through recorded lecture pods and online exercises, students are introduced to the basic tools of stylistic analysis, including narrative analysis, metaphorical analysis and critical discourse analysis.

300808.2   Introductory Chemistry

Credit Points 10 **Level** 1

Assumed Knowledge

General Mathematics or equivalent.

Equivalent Units

300469 - Introductory Chemistry

Incompatible Units

300800 - Essential Chemistry 1

Special Requirements

Students require safety goggles, laboratory coat and laboratory book.

....

This unit is an introduction to the fundamental chemistry principles and skills required for students studying courses in food, nutrition, and the environment. The emphasis is on the structure and reactivity of substances and mixtures in different chemical environments, and exposed to different forms of electromagnetic radiation. The focus is on chemistry in aqueous environments and the atmosphere, and studied using a systems approach.

700155.2   Introductory Chemistry (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

General Maths or equivalent

Equivalent Units

300808 - Introductory Chemistry

Incompatible Units

300800 - Essential Chemistry 1, 700121 - Essential Chemsitry 1 (UWSC)

Special Requirements

Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Students require safety goggles, laboratory coat and laboratory book.

....

This unit is an introduction to the fundamental chemistry principles and skills required for students studying courses in food, nutrition and the environment. The emphasis is on the structure and reactivity of substances and mixtures in different chemical environments and exposed to different forms of electromagnetic radiation. The focus is on chemistry in aqueous environments and the atmosphere and studied using a systems approach.

700204.2   Introductory Programming (WSTC Prep)

Credit Points 10 **Level** Z

Assumed Knowledge

The ability to create a mathematical expression for a given problem scenario. This would require knowledge of basic arithmetic, percentages and simple statistical measures.

Equivalent Units

900084 - Introductory Programming (UWSC)

Special Requirements

Students must be enrolled at Western Sydney, The College.

....

This unit introduces students to the principles required for the effective design and development of computer programs. This unit has been developed to help students acquire an understanding of essentials in designing programs theoretically and implementing them practically using an integrated development environment (IDE).

300918.1   Invertebrate Biology

Credit Points 10 **Level** 3

Prerequisite

300802.1 Biodiversity OR **300816.1** Cell Biology

Equivalent Units

300334 - Invertebrate Biology

Special Requirements

Students must have covered footwear for practical classes and field excursions; laboratory coat and safety glasses.

....

Invertebrates are the most diverse and abundant organisms in aquatic and terrestrial environments. Due to their key role in many ecosystems, biologist E. O. Wilson coined the phrase of invertebrates as the 'little things that run the world'. Besides their ecological importance, many invertebrates are useful to humans, whereas others are harmful to agriculture, human and veterinary health. This unit highlights invertebrate diversity and life histories as well as their key ecological and economic importance. It also includes hands-on laboratory and field studies. This unit is designed for students with career pathways in science (e.g. animal, environmental, forensic and medical sciences) as well as agriculture, environmental management and education.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 389

Units

200819.1   Investment Management

Credit Points 10 **Level** 3

Assumed Knowledge

Good understanding of corporate financial management

Incompatible Units

200057 - Investment Management, 200078 - Portfolio Management

....

Investment Management describes the theory and practice of investment decision-making. The general objective of the unit is to introduce students to the tools of financial investment by providing a conceptual framework within which the key financial decision of investment can be analysed. This unit provides an overview of the theory of investing by describing investor indifference curves and optimal portfolios. The unit will include evaluating asset allocation, security selection and security analysis within an active portfolio management framework, measuring portfolio performance and security selection decisions.

101467.2   Islam in Southeast Asia

Credit Points 10 **Level** 3

Equivalent Units

63213 - Islam in Asian and World Politics

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Islam is a significant feature of Southeast Asia's past and present. Employing methodologies and insights drawn primarily from history, political science, and anthropology, this unit explores Islam's place in and contribution to contemporary Southeast societies and politics, as well as its history in the region. Major themes to be explored include: the debates about Islam's spread to Southeast Asia and its interaction with the region's established socio-religious features, the colonial experience, Islam's often contested place in the national life of Southeast Asian nations, its past and ongoing links with the rest of the Muslim world, as well as contemporary issues associated with the War on Terror and conflicts in Muslim societies.

101463.4   Islam in the Modern World

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

In 2015 this unit replaced by 102294 - Islam in the Modern World. This unit introduces students to Islam an its adherents within contemporary globalcontext. It looks at key Muslim intellectuals from the 19th Century till the present and examines their attempts to come to terms with modernity as a Western project while addressing critical issues facing Islam. Areas for consideration include: renewal and reform; the impact of colonialism and globalisation on Muslim discourse; independent judgment (ijtihad) versus emulation (taqlid); and issues associated with civil society. Students will also explore the challenge of shaping a Muslim identity in the modern world in the context of key Muslim institutions and social movements.

102294.1   Islam in the Modern World

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit introduces students to Islam and its adherents within contemporary global context. It looks at key Muslim intellectuals from the 19th Century till the present and examines their attempts to come to terms with modernity as a Western project while addressing critical issues facing Islam. Areas for consideration include: renewal and reform; the impact of colonialism and globalisation on Muslim discourse; independent judgment (ijtihad) versus emulation (taqlid); and issues associated with civil society. Students will also explore the challenge of shaping a Muslim identity in the modern world in the context of key Muslim institutions and social movements.

101822.3   Islam in the West

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The unit focuses on the question of Muslim presence in the West with reference to the dynamics of inclusion and exclusion. Its aim is to enable students to look at the question of Muslim presence in terms of an action-reaction phenomenon in which different outlooks, ideas, institutions and nodes of information and authenticity interact to create an environment in which identities are developed. These identities then go on to shape the cooperative and conflictual relationships between different subsections of Muslim minorities and the majority non-Muslim Western states and societies. While focusing on the contemporaneity of the question, the unit looks at the study of Muslim presence in the West in a socio-historical context by providing an understanding of how Muslim-Western contacts shaped the nature of their relationship in the past. Then, the unit looks to contrasting the changes before and after 9/11 with reference to a set of ideas, institutions and contexts.

101468.2   Islam, Media and Conflict

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Provides students with an understanding of global, regional and local news media production and representations of Islam and Muslim societies. It discusses new, emerging and alternative forms of media discourses of conflict in the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 390

Muslim world, and analyses selected news reports as forms of case studies. Taking the notion of 'Orientalism' as its starting point, the subject/unit critically examines the extent to which the mediatisation of conflict impacts relations between Islam and the West vis-a-vis debates on Orientalism, 'Asian values' and Islamic world views.

101465.2 Islamic Law in a Changing World

Credit Points 10 **Level** 3

Prerequisite

101462.2 Understanding Islam and Muslim Societies OR
101464.2 Great Texts of Islam: Qur'an and Hadith

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit introduces students to Islamic legal theory, its sources and principles, and its application by different schools and scholars to derive religious verdicts. Students will study efforts to 'streamline' Islamic law through a number of Sunni and Shiite schools, various conceptions of shari'ah, and modern attempts at law reform through dynamic scholarship and ijtihad (independent judgment). Upon completion, students should be able to explain developments in Islamic legal thought within their socio-historical contexts, and identify key debates among Muslim scholars. Using current case studies, students will also study Islamic law issues affecting Muslims today, especially Muslim minorities.

102297.1 Islamic Revivalism in the Globalised World

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

In the last decades there has been a surge in Islamic consciousness in Musllim communities across the globe. Islamic history has been punctuated by periods of revivalist activity and its hallmark always has been a desire for the return to Islamic origins - the basics of the faith as enshrined in the islamic scripture. This unit explores the phenomenon of contemporary Islamic revivalism. The unit contrasts contemporary Islamic revivalism with earlier expressions. It aims to demonstrate that contemporary Islamic revivalism has manifested itself in a multiplicity of forms as a defensive reaction to an epoch characterised as modernity.

101331.2 Issues in World Development: Rich World, Poor World

Credit Points 10 **Level** 2

Equivalent Units

400677 - Issues in Third World Development

....

This unit introduces students to the field of international development, where the divide between the rich world and poor world takes a centre stage. While development has created prosperity around the world, it is not without discontents. Social and economic inequality at the global level is a real problem and has been increasing. The 'developed' and 'developing' world paradigm will be critically examined. Students will be equipped with theories and practicum examining development, underdevelopment and their related issues within a contemporary political, economic and social framework. Students will also have exposure to current global development debates such as poverty, global inequality, sustainable development, democracy and security.

100085.2 Japanese 101

Credit Points 10 **Level** 1

....

This unit is an introduction to the Japanese language and some related culture. It is intended for beginner students only, who have never studied Japanese. This unit will cover the most basic level of the Japanese language in all four skills: listening, speaking, reading, and writing. The Japanese characters covered in this unit include the hiragana and katakana.

100086.2 Japanese 102

Credit Points 10 **Level** 1

Assumed Knowledge

100085 Japanese 101 or equivalent knowledge

....

This unit builds on the skills developed in Japanese 101. It aims to have students increase the range of communicative transactions in the four skills and to acquire more complex grammatical structures and vocabulary. A further 110 kanji characters are taught in this subject.

102028.1 Japanese 201

Credit Points 10 **Level** 2

Assumed Knowledge

Japanese 102 or equivalent

Equivalent Units

101702 - Language & Communication Skills 2A: Japanese

....

This unit is designed as a post-beginner level language and culture unit intended for students who have studied this language to at least HSC level or equivalent. This unit focuses on the development of the grammatical structures and vocabulary in such areas as using polite and plain style of the language, verb conjugation for expressing conjecture, adverbial clauses indicating specific times and places, conditional, etc. The knowledge of kanji is increased to 260 characters. NOTE: Students enrolling in this unit as part of a major or sub-major in Japanese must enrol in Japanese 202 at the same time.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 391

102029.1   Japanese 202 Speaking and Listening

Credit Points 10 **Level** 2

Assumed Knowledge

Japanese 102 or equivalent knowledge

Equivalent Units

101702 - Language & Communication Skills 2A: Japanese

....

This unit is normally undertaken concurrently with, or after, Japanese 201. It is designed to develop and expand speaking and listening skills based on the grammatical knowledge developed in Japanese 201. The range of communicative transactions is increased so that more sophisticated exchanges are possible, for instance when using polite and plain (i.e. casual) styles of speech, describing one's conjecture, stating an opinion, asking for explanation, etc. Cultural and social understanding of Japanese society is also fostered. NOTE: Students enrolling in this unit as part of a major or sub major in Japanese must enrol in Japanese 201 at the same time.

102030.1   Japanese 203

Credit Points 10 **Level** 2

Assumed Knowledge

Japanese 201 or equivalent

Equivalent Units

101707 - Language & Communication Skills 2B: Japanese

....

This unit further develops students' language skills acquired in Japanese 201 to equip students with more sophisticated language skills and knowledge. Among the topics covered in Japanese 203 are: stating a plan or intention, making a suggestion in the plain form, offering advice, indicating the degree of certainty, describing a change in state, indicating causes of reasons, using of the passive and the imperative, etc. By the end of this unit, students will be able to read and write approximately 380 kanji characters. NOTE: Students enrolling in this unit as part of a major or sub major in Japanese must enrol in Japanese 204 at the same time.

102031.1   Japanese 204

Credit Points 10 **Level** 2

Assumed Knowledge

Japanese 201 and 202 or equivalent knowledge

Equivalent Units

101707 - Language & communication Skills 2B: Japanese

....

This unit is undertaken concurrently with, or after, Japanese 203. It is designed to further develop and expand speaking and listening skills on the basis of grammatical structure introduced in Japanese 203 and increase the range of communicative transactions developed in Japanese 202 so that more sophisticated exchanges are possible when stating a plan or intention, making a suggestion, offering advice, indicating the degree of certainty, describing a

change in state, indicating causes, using the passive and the imperative, etc. This unit will also present further aspects of contemporary Japanese culture and society. NOTE: Students enrolling in this unit as part of a major or sub major in Japanese must enrol in Japanese 203 at the same time.

101952.1   Japanese 301

Credit Points 10 **Level** 3

Assumed Knowledge

Japanese 203 and 204 or equivalent knowledge

Equivalent Units

101712 - Languages and Grammatical Concepts 3A: Japanese

....

This is a Level 3 unit within the Japanese major program, intended for students who have successfully completed Japanese 202 or have acquired equivalent knowledge. It enhances students' comprehension of and ability to use new grammatical structures, expressions, interaction strategies and Kanji characters. In addition to improving the four primary language skills and ability needed for working in Japan or with Japanese people, this unit aims to advance students' knowledge of the modern Japan through the recommended texts and class discussions.

100092.3   Japanese 302

Credit Points 10 **Level** 3

Assumed Knowledge

Japanese 301 or equivalent knowledge.

....

After covering basic Japanese grammar in previous units, this unit is designed to further improve and extend students' competence in Japanese. It enhances students' knowledge and comprehension of Japanese, and develops their ability to apply this knowledge and comprehension to written and spoken Japanese. In addition to the language skills, this unit covers further aspects of Japanese culture through the recommended texts and class discussions.

100093.2   Japanese 303: Contemporary Culture and Society

Credit Points 10 **Level** 3

....

This unit aims to provide students with a valuable insight into modern Japanese culture and society via learning the language at an advanced level. In this unit, students will further enhance their four skills in the language with a focus on listening and speaking.

101970.1   Japanese 304: Discourse in Japanese

Credit Points 10 **Level** 3

Assumed Knowledge

Japanese 203 and Japanese 204 or eqiuvalent knowledge.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 392

Equivalent Units

100094 - Japanese 304: Discourse in Japanese

....

This unit is designed to enable post-intermediate students of Japanese to learn and practice spoken Japanese at an advanced level. Students will explore Japanese discourse styles and discourse strategies in a range of situations, registers and levels of formality. In addition to the essential readings, materials drawn from educational videos, feature films, television dramas, news programs and language corpus will be used for class discussions and as data for analysis.

101971.1   Japanese 305: Advanced Reading and Writing

Credit Points 10 **Level** 3

Assumed Knowledge

Japanese 203 and 204 or equivalent knowledge

....

Students in this unit will further develop their competency in Japanese with a focus on reading and writing at an advanced level. The unit content is organised around communicative and cultural themes on Japanese society. To expose students to authentic language use, reading materials of different genres are selected from Japanese newspapers, magazines, Japanese language corpus and the internet. Acquisition of Kanji is accelerated through reading and writing tasks.

100096.2   Japanese 306: Japanese for Business

Credit Points 10 **Level** 3

....

This unit prepares students to function effectively in business and commercial contacts with Japanese people. It will encompass the study of various types of business documents and spoken language appropriate to a range of business-related situations. It will also cover aspects of business culture and conventions.

102219.1   Japanese 306: Japanese Popular Culture

Credit Points 10 **Level** 3

....

This unit aims to reinforce the Japanese language in all four skills: speaking, listening, reading and writing, via the medium of Japanese popular culture, e.g. manga, anime, Japanese drama and/or J-pop, by exploring and analysing culturally and linguistically specific issues of the language, e.g. address terms and taking turns. Students will explore natural Japanese text and speech in both casual and formal styles at an advanced level, as well as increase their knowledge and understanding of Japanese popular culture

100098.1   Japanese 308: Japanese Textual Studies

Credit Points 10 **Level** 3

....

Nihonjinron (the theory of uniqueness of the Japanese) has been discussed for many decades. Some scholars advocate the need for re-examining the concept, while others still hold the view that the Japanese have different sensitivities and values from people with other ethnic backgrounds. This unit aims to develop students' awareness of some of the arguments on this topic by reading relevant texts written by sociologists, anthropologists and novelists. Students will have opportunities to examine, analyse, discuss and evaluate texts from a range of authors. Texts are all written in contemporary Japanese.

100001.3   Keeping the Past

Credit Points 10 **Level** 2

Equivalent Units

53403 - Keeping the Past

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Legislation requires the preservation of natural, built and movable heritage, but choices about what to keep often produce controversy and reveal starkly varying opinions. Physical deterioration can mean that some things can not be kept. The historian's investigation of places and objects is an important part of the assessment process and the evaluation of what might be kept and why. Parramatta has a rich selection of heritage places. How does heritage fit in a modern CBD? Site visits around the city will identify archaeological and architectural heritage to promote discussions, visits to nearby museums will put these places in context and historical research will unravel their meanings.

300035.3   Kinematics and Kinetics of Machines

Credit Points 10 **Level** 2

Prerequisite

200237.3 Mathematics for Engineers 1 AND **300463.2** Fundamentals of Mechanics

Equivalent Units

86222 - Engineering Mechanics 2

....

In this unit rigid body kinematics is analysed from the freedom-and-constraints point of view and graphical approaches to velocity and acceleration analyses are covered. The unit looks at how one or more particles move in one, two or three dimensions and how forces cause these movements. It also looks at how forces and couples cause the movement of a single rigid body in two and three dimensions. The movement of multi-body mechanisms and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 393

Units

gear trains, and the geometry of gear teeth and cams are studied.

700244.1 Kinematics and Kinetics of Machines (WSTC AssocD)

Credit Points 10 **Level** 2

Prerequisite

700101.1 Mathematics for Engineers 1 (UWSC Assoc Deg) AND **700113.2** Fundamentals of Mechanics (WSTC AssocD)

Equivalent Units

300035 - Kinematics and Kinetics of Machines

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

In this unit rigid body kinematics is analysed from the freedom-and-constraints point of view and graphical approaches to velocity and acceleration analyses are covered. The unit looks at how one or more particles move in one, two or three dimensions and how forces cause these movements. It also looks at how forces and couples cause the movement of a single rigid body in two and three dimensions. The movement of multi-body mechanisms and gear trains and the geometry of gear teeth and cams are studied.

300883.1 Laboratory Quality Management

Credit Points 10 **Level** 3

Assumed Knowledge

A demonstrated understanding of and competence with laboratory techniques in analytical chemistry or microbiology, corresponding to successful completion of a Level 2 Microbiology or Analytical Chemistry unit.

Equivalent Units

300656 - Laboratory Quality Management

Special Requirements

Successful completion of 60 credit points at level 1 and 40 credit points at level 2 in Bachelor of Science, Bachelor of Medical Science of Bachelor of Natural Science.

....

This capstone unit is directed towards the accreditation of a laboratory for chemical, microbiological or forensic testing, using the standards that are applicable in industry. The unit focuses upon the importance and coordination of good laboratory management, teamwork, calibration, record keeping and laboratory manuals. Groups of students are required to develop, establish and operate a comprehensive Laboratory Quality Management system designed for a specific class of chemical, microbiological or forensic test. The students' technical competence and quality system are then assessed using the guidelines laid down by the National Association of Testing Authorities (NATA).

300138.3 LAN Workshop

Credit Points 10 **Level** 2

Assumed Knowledge

Ability to list, discuss and compare the elements of information coding and signal transmission. List, describe and explain the elements and functional relationships of communications hardware and software. Identify, locate, distinguish and describe the individual hardware components of a personal computer (PC) and explain their purpose, functions and operations. Install PC components, devices and peripherals in accordance with installation procedures and operational standards.

Equivalent Units

300576 Networking Workshop

....

This unit provides students with the knowledge and skills necessary to install, test, tune, customise, repair and maintain networking hardware and software necessary to create a Local Area Network (LAN). Students also learn how to administer a LAN by setting up user accounts, access privileges, security procedures and back-up/recovery procedures.

300875.1 Landuse and the Environment

Credit Points 10 **Level** 2

Equivalent Units

300624 - Landuse and the Environment

....

This unit will assist students develop a sound framework for the analysis of land use and its interactions with the environment. The skills gained will assist in the evaluation of land use at various levels from household to international level. Particular emphasis will be placed on students gaining a sound conceptual framework from which to examine sustainability at the environmental, economic, social, and production levels. Emphasis will be placed on the use of ecological footprinting as a tool.

200007.2 Law Foundation

Credit Points 10 **Level** 1

Corequisite

200006.2 Introduction to Law

Equivalent Units

69055 - Law Foundation Subject, F1002 - The Legal Context, LW201A - Legal Context: Reasoning, Writing and Professional Responsibility

....

The unit exposes students to the contexts that affect how law is made, some of the institutional limitations on law and justice and the impact of globalisation on law. It introduces theories about the nature and function of law in historical, political, social, economic, cultural, ethical and international contexts. In particular, it addresses the connection between race, gender, culture and law.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 394

200183.4   Law of Business Organisations

Credit Points 10 **Level** 2

Prerequisite

200184.3 Introduction to Business Law

Equivalent Units

LW208A - Law of Business Organisations, 61522 - Business Associations Law, F2066 - Business Associations Law

....

This unit deals with legal issues concerning the creation and control of companies and compares this structure with other forms of business organisations, such as partnership, trusts and sole traders. This unit will provide students with an appreciation of the law of partnership, and companies and, for the sake of completeness and comparison, a brief examination of the law regarding unincorporated and incorporated non-profit associations.

200863.1   Leadership and Entrepreneurship

Credit Points 10 **Level** 3

....

This unit explores the links between leadership and entrepreneurship in the context of dynamic domestic and global environments. It develops an understanding of how to initiate a business venture, taking advantages of perceived opportunities and mobilising the required resources. To this end, different theories and perspectives on leadership and entrepreneurship are examined, and students are encouraged to apply them to real-life situations. The knowledge and skills learned in this unit will enable future leaders to revitalise organisations and create value in the process of transforming innovations into goods or services.

400777.3   Leadership for Quality and Safety in Health Care

Credit Points 10 **Level** 7

Equivalent Units

400842 - Quality and Safety in Health Care

Special Requirements

Students must be enrolled in a postgraduate course. Students enrolled in course 4673 must have passed the following three units before they can enrol in this unit: 400220 - Contemporary Professional Practice in Mental Health Nursing and 400206 - Evidence-based Nursing and 400235 - Leadership in Clinical Practice.

....

Increasingly clinical leaders, practitioners and health service managers are being held accountable for improving the quality and safety of patient care and for developing a culture of quality improvement within their teams. In this unit students learn about quality, patient safety and governance frameworks and strategies that they can employ within healthcare to improve system performance, patient safety and patient outcomes. The main approaches used to address quality of care and patient safety are examined and their applications critiqued. Students will explore leadership issues for developing systematic, coherent quality improvement frameworks and quality initiatives that can be applied within their own sphere of practice.

200855.1   Leadership in a Complex World

Credit Points 10 **Level** 1

Incompatible Units

200857 Leadership and Uncertainty

....

This unit is designed for students from Advanced Degrees who are enrolled in The Academy. The focus here is the leadership of groups and teams in a cross-disciplinary environment and its application in various contexts. The unit encourages the examination of leadership through the lens of multiple disciplines thereby broadening perspectives of leadership and inspiring students to think and act outside the silos of their disciplines. Through the unit, students will be challenged to think about preparing for unknown futures and the nature of the skill sets necessary to prepare for and respond to change and innovations. This subject is available to all students of The Academy and also provides an ideal background for students enrolling in Advanced Business Leadership including unit 200573 Business Leadership

401028.1   Leadership in Nursing (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 190 credit points in an undergraduate advanced nursing program.

Equivalent Units

400849 - Leadership in Graduate Practice (Advanced)

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit for Bachelor of Nursing Advanced nursing students explores fundamental and advanced concepts and issues related to leadership in nursing. The unit focuses on exploration of contemporary, emerging and innovative approaches to leadership that may contribute to nursing standards, person-centred practice, evidence-based leadership, critical reflection and critical thinking in dynamic healthcare contexts.

401022.1   Leadership in Nursing and Midwifery

Credit Points 10 **Level** 3

Assumed Knowledge

Successful completion of at least 190 credit points in an undergraduate nursing or midwifery program.

Equivalent Units

400766 - Leadership in Graduate Practice

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 395

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4692 Bachelor of Nursing Graduate Entry or 4684 Bachelor of Midwifery.

....

The unit explores fundamental concepts and issues related to leadership in nursing and midwifery. The unit focuses on exploration of contemporary, emerging and innovative approaches to leadership that may contribute to nursing and midwifery standards, person-centred practice, evidence-based leadership, critical reflection and critical thinking in dynamic healthcare contexts.

101259.3 Learning and Creativity

Credit Points 10 **Level** 2

....

This unit examines the inter-related processes of learning and creativity and the application and practice of these in all aspects of life. Learning and Creativity is contextual. This context is personal, social, cultural and environmental. The unit content is critically positioned within diverse theories, with an emphasis on experiential learning and ongoing critical reflection. The unit promotes understanding of feeling and experience as much as concepts and ideas. It emphasises the tools and skills of learning, the everyday nature of creativity and enables students to develop and apply their creativity. It is designed for students interested in personal, community and cultural development, in the context of far reaching change.

800171.1 Learning and Processing Human Language

Credit Points 10 **Level** 7

Assumed Knowledge

Master of Research core units: Research Design 1, Research Literacies or equivalent

....

How do humans learn and process language, in its spoken, gestural, and written forms? This unit will equip students with theoretical foundations and practical understandings of how to read and conduct research in this area. Topics may include research areas such as language acquisition, language use and communication, word recognition, reading development and disorders, speech perception and production. In addition, a review of data collection and analysis techniques will be provided. The unit will include lecture and laboratory experimental work. The unit will be focused on research currently conducted by members of the MARCS Institute.

102158.1 Learning and Teaching in Challenging Contexts

Credit Points 10 **Level** 7

....

This unit involves the study of pedagogy in contexts regarded as challenging. The main focus will usually be on the contexts of school and early childhood, but alternative sites of education will also be studied as appropriate. The

definition of a challenging context will be considered with an emphasis on contexts of poverty. The unit explores engaging pedagogies and unit will investigate specific dilemmas for education. The unit will be structured around dilemmas and specific provocations.

401037.1 Legal and Ethical Issues in Midwifery

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge from all Year 1 units from the Bachelor of Midwifery and: 401009 Health in a Culturally Diverse Community; 401011 Research Principles for Nursing and Midwifery; and 401034 Midwifery Knowledge 3.

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit explores the nature and professional context of midwifery. The roles and functions of the midwife and their relationship to others are considered in terms of expected competence, responsibilities, accountabilities and scope of practice within the regulatory framework.

400789.3 Leisure Education Programming and Mental Health

Credit Points 10 **Level** 3

....

In this unit students will explore the complexity of mental health. Students will develop a philosophical approach to leisure and recreation facilitation skills for individuals with a mental health condition. Students will be able to use appropriate decision-making processes in recreation programming for a range of people across the lifespan with mental illness.

200027.2 Linear Algebra

Credit Points 10 **Level** 2

Assumed Knowledge

Content of 200025 - Discrete Mathematics

Equivalent Units

J1730 - Mathematics 1.2, J2764 - Mathematics 2.1

....

The objective of this unit is to present the main fundamentals of linear algebra and includes such topics as solving systems of linear equations, matrix algebra, determinants, eigenvalues and eigenvectors, Euclidean vector spaces, general vector spaces, inner product spaces and linear transformations.

700227.2 Literacy in Health Science (WSTC Prep)

Credit Points 10 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 396

....

The health care system and health education in Australia is comprised of many different roles and fields of study in the delivery for holistic care and services. Health Science concepts such as acute care and chronic care, health education, rehabilitation and palliative care will be explored. Terminology used in healthcare and in measuring health data (epidemiology) will also be introduced. Measuring health related to morbidity, comorbidities and mortalities through measuring quality of life and disability adjusted life years will also be introduced. This unit aims to give students an understanding of health science practice in Australia both in city and rural settings and identifying role expectations of the health professional.

100875.4   Literature and Philosophy

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit will examine ways in which literature and philosophy interact. It will consider the ways in which literature and philosophy offer important and different ways of thinking. And it will consider the differences between literature and philosophy. Literature will be understood to involve thinking through sensations, while philosophy will be understood to involve thinking through concepts. The unit will examine examples of interaction between literary texts and philosophical texts, considering how literary effects can inhabit philosphical texts and philosophical ideas can permeate literary texts. The unit will consider frequently occurring themes within both literature and philosophy, such as ethics (ways of living and acting).

101739.3   Literature and Trauma

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit considers the relationship between narrative and trauma and writing and trauma. It looks at the discourses of trauma, including psychoanalytic and psychiatric, philosophical and that belonging to literary criticism. It considers the politics of testimony and trauma in history; the role of narrative in healing and the remaking of Self; the crises of the "witness" and the limits of narrative in recalling trauma in psychoanalysis, literature, and history. It considers the socially produced limits of narratives of trauma. It also considers the meeting point between trauma, its wound and writing. The unit canvasses a raft of life-writing and fictional writing whose subject is trauma and or traumatic experience.

101966.1   Literatures of Decolonisation

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Do you know why nearly a hundred new nations were founded between 1945 and 1970? Have you ever wondered who Mahatma Gandhi or Ho Chi Minh were? Why would you challenge authority 'non-violently'? How do you write creatively in a language that has been imposed through colonial conquest? These are all questions connected to decolonisation: the explosive process by which great modern European empires dissolved after World War II forming scores of new nations - from Indonesia to Algeria, India to Nigeria, Jamaica to Vietnam. With this came a surge of creative energy, as formerly colonised peoples set out to produce new ways of writing and thinking. We will read classic anti-colonial politicians like Gandhi and Frantz Fanon and writers from different decolonising regions such as India, Africa, South-East Asia, the Caribbean, the Middle East and Australia.

301070.1   Logic, Rhetoric and Argumentation

Credit Points 10 **Level** 2

Special Requirements

Students must have a minimum GPA of 5 and be enrolled in The Academy at UWS; i.e. students enrolled in the Bachelor of Applied Leadership and Critical Thinking or other advanced courses at the discretion of the Academy or the Dean.

....

This unit is designed for high-achieving students who may be enrolled in Advanced degrees or the Bachelor of Applied Leadership and Critical Thinking. This unit provides students with a detailed understanding of logical and rhetorical arguments in order to prepare them for leadership roles in the future. Throughout the unit, students will appraise the structure of logical and rhetorical arguments, evaluate classical arguments and critiques and assess the structure, validity and soundness of philosophical arguments.

101733.2   Looking at Global Politics Through Film

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Popular representations of world politics shape our collective understanding of political history and international relations. This unit examines the ways in which film can communicate political messages to its audience, as well as the far more difficult issue of the effects that those messages might have on viewers. Although the discipline of International Relations (IR) has overwhelmingly ignored

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 397

popular culture, it is the argument of this unit that popular culture actually provides us with a wealth of significant representations of world politics.

200926.1 Macroeconomic Measures and Models

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge acquired in introductory microeconomics, macroeconomics and accounting.

Equivalent Units

200546 - Macroeconomic Issues

....

The unit equips students with formal tools to analyse macroeconomic problems. Students learn to use macroeconomic terms and measures competently in discussion, and interpret data from the income, product, external and government accounts, and labour force surveys. Through hands-on experience constructing and applying price indices, deflators and productivity measures, they acquire practical skills and a sound conceptual understanding of economic variables and the accounting framework. Students come to appreciate the power of macroeconomic models, learning how to capture myriad mechanisms and feedbacks in a single framework, for example to define and quantify multipliers and crowding-out effects. Finally, students gain an understanding of fundamental external constraints, such as international parity and balance of payments equilibrium conditions.

400768.4 Maintaining Clinical Currency

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of the nature of health, principles and mechanisms involved in body function, principles of safe nursing practice including safe administration of medications and components of effective interpersonal communication.

Prerequisite

400764.3 Transition to Graduate Practice

Special Requirements

Restricted to students who have met all course requirements and who have not completed a clinical placement in the final six months of study in the Bachelor of Nursing degree. Special Requirements: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1. A National Police Certificate or a Criminal record clearance card (if issued before 1st June 2010); 2. A completed vaccination card with serology results attached; 3. Four forms completed and taken to every placement (with a copy): a. Working with Children Student Declaration, b. Code of Conduct, c. Form 2: TB Assessment Form, d. Form 3: Student Undertaking/ Declaration form; 4. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace.

....

This unit provides students with the opportunity to review: the pathophysiological aspects of health breakdown in individuals; the knowledge of pharmacological processes within nursing practice; and, to demonstrate competency in skills essential to the nursing management of individuals with various types of health breakdown. In addition students will complete a four-week negotiated clinical practicum prior to graduate employment.

300459.2 Major Project Commencement

Credit Points 20 **Level** 4

Assumed Knowledge

Knowledge related to the successful completion of year 3 Industrial Design is assumed.

Prerequisite

300313.3 Design Studio 4: Simulate to Innovate AND **300314.2** Designed Inquiry

Corequisite

300775.2 Industrial Experience

Special Requirements

Successful completion of 220 credit points.

....

This unit prepares students to be flexible and innovative, with the emphasis placed on design, and its place in and effect on society and people. Students are challenged to respond to a real world design brief focusing on a specific user group and context-of-use. Students undertake desk, field and practical research in order to find design opportunities for detailed development in the second semester of the fourth year program. Peer learning is an important part of the learning experience, as is a user-centred design research approach and is facilitated by an intensive off-campus field trip in the project start-up phase.

300460.2 Major Project Completion

Credit Points 30 **Level** 4

Assumed Knowledge

Knowledge related to the successful completion of Year 3 Industrial Design is assumed and successful completion of Major Project Commencement and Major Project Commencement's co-requisite units.

Prerequisite

300459.2 Major Project Commencement

Corequisite

300013.3 Design Management 2: Corporate Image and Identity OR **300015.3** Design Management 4: Design Process OR **300315.3** Industrial Graphics 5: Integrated

....

Major Project Completion is the project realisation component of the student's final year program. The unit offers the student the chance to consolidate the range of methodologies and processes developed and evaluated in Major Project Commencement, that contextualise the principles and practices that will lead to the realisation of their identified design solution. The final design outcome will form part of the final year graduate exhibition. The

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 398

design solution which students will be developing and submitting for this unit responds to the design brief developed in Major Project Commencement.

301032.1 Making Sense of Data

Credit Points 10 **Level** 2

Assumed Knowledge

Basic Statistics.

Prerequisite

300700.5 Statistical Decision Making OR **200263.5** Biometry OR **200032.5** Statistics for Business

....

The unit builds on the basic statistical concepts introduced in first year, and also prepares students for broader application of statistics for those majoring in science or business. Topics include hypothesis testing; analysis of categorical data; analysis of variance; non-parametric methods; re-sampling (cross validation/bootstrapping); Introduction to visual data analysis; simple Multivariate statistics and sampling and design.

200116.4 Management Accounting Fundamentals

Credit Points 10 **Level** 1

Prerequisite

200101.3 Accounting Information for Managers OR **200103.1** Accounting Reports and Decisions

Corequisite

200111.2 Financial Accounting Applications

....

This unit provides an introduction to management accounting in an e-commerce environment. The interrelations of management accounting to other functional areas, to suppliers, to customers, and to other sources of external information relevant to planning and control are examined. Topics include the development and logic of routine and non routine analysis performed to support management decision making.

301123.1 Management Analytics

Credit Points 10 **Level** 1

Assumed Knowledge

HSC maths (2 unit desirable) or equivalent.

Equivalent Units

200032 Statistics for Business, 200052 Introduction to Economic Methods, 300700 Statistical Decision Making, 200263 Biometry

....

Management Analytics provides students with introductory knowledge and skills in analysing and interpreting data relevant to business and management. Students will learn how to organise and summarise data numerically, present data and statistics visually, utilise basic forecasting, and interpret the results of data analysis. Students will develop skills to enable evidence-based decision-making in management.

200571.4 Management Dynamics

Credit Points 10 **Level** 1

Equivalent Units

700080 - Management Dynamics, 700003 - Management Dynamics (UWSC)

Incompatible Units

MG102A - Management Foundations, 200879 - Introduction to Business Studies

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course or specialisation.

....

In 2016, this unit replaced by 200912 - Enterprise Leadership. The unit provides an opportunity for students to engage with the fundamental issues and theories of management as well as understand that management itself is dynamic and evolving. Students will be introduced to how work and management systems are organised and managed, and how these impact upon individuals, other organisations or society as a whole. The unit covers both the theory and the practice of management and employment relations and is an essential unit for business students in order that they achieve a broad initial understanding of management and employment relations.

700003.4 Management Dynamics (WSTC)

Credit Points 10 **Level** 1

Corequisite

700002.4 Business Academic Skills (WSTC)

Equivalent Units

200571 - Management Dynamics, 700252 - Enterprise Leadership (WSTC)

Incompatible Units

MG102A - Management Foundations, 700143 - Management Foundations (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. The co-requisite unit 700002 - Business Academic Skills (WSTC) noted above applies to students in the Business and Commerce courses only.

....

In 2016, this unit replaced by 700252 - Enterprise Leadership (WSTC). The unit provides an opportunity for students to engage with the fundamental issues and theories of management as well as understand that management itself is dynamic and evolving. Students will be introduced to the connection how work and management systems are organised and managed, and how these impact upon individuals, other organisations or society as a whole. The unit covers both the theory and the practice of management and is an essential unit for business students in order that they achieve a broad initial understanding of management and employment relations.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 399

300824.1 Management of Aquatic Environments

Credit Points 10 **Level** 1

Equivalent Units

300633 - Management of Aquatic Environments

Special Requirements

Students will need a lab coat and suitable protective clothing for fieldwork.

....

This unit introduces students to the physical, chemical and biological nature of water systems and the linkages to human activity. These linkages include a development of an appreciation of the essential services and broad uses and values of water in modern human society, and the natural environment. Students are challenged to examine the causes and effects of water pollution and environmental degradation. Students are introduced to scientific water sampling, analysis and reporting of water quality and pollution.

200376.3 Managing and Developing Careers

Credit Points 10 **Level** 2

Equivalent Units

200914 - Working in Professions, 200915 - The Service Enterprise

Special Requirements

Successful completion of 60 credit points .

....

Managing and Developing Careers focuses on employability and career progression. The unit is one of four units in the Management professional core in the Bachelor of Business but is open to all students with an interest in reflecting on career progression in leadership and management-related careers. The unit will utilise portfolio development, case studies, occupational and industry research to assist participants identify and reflect on strategies to facilitate achievement and employability. Successful completion of the unit will result in students creating an ongoing portfolio directed to future employability.

101633.2 Managing Cities: History and Theory

Credit Points 10 **Level** 7

Equivalent Units

101310 - Metropolitan Structures: Cities in Transformation

....

This unit concerns philosophical thought and critical thinking in public planning. It develops an understanding of planning theories and examines past and present trends in this area. It reviews the theoretical frameworks for an insight into planning processes and analyses the economic, spatial and socio-political dimensions of activities involved.

200864.1 Managing in the Global Environment

Credit Points 10 **Level** 2

Equivalent Units

200586 Cross Cultural Management

....

This Unit introduces students to the complexities of managing in the changing economic, political, legal, technological and socio cultural factors that influence management practice. By addressing issues of cultural awareness, this unit provides an organisational behaviour approach to managing in a dynamic global environment. Management practice and theoretical knowledge are linked in this unit through experiential based learning and assessment activities such as critical analysis of contemporary media, research and case studies.

200865.1 Managing Operations

Credit Points 10 **Level** 3

Assumed Knowledge

Students are expected to have gained an introductory level of knowledge in operations and supply chain management.

Equivalent Units

200588 Global Operations and Logistics Management

....

Managing Operations is a comprehensive unit that focuses on the importance of operations in creating competitiveness and dynamic capabilities for individual organisations and organisations connected through supply chains and logistics processes within a global context. The unit is designed for students interested in enhancing their knowledge and skills in designing and improving critical operational processes used by organisations to provide products and services to customers. It encompasses internal and external operations for manufacturing and service organisations; their strategic choices; and tactical and operational decision-making processes for the management of critical and extended resources. The latest qualitative and quantitative tools and techniques, online business simulations and international case studies are used to practise problem solving processes to address challenges of a global nature in the business world.

200300.2 Managing People at Work

Credit Points 10 **Level** 1

Equivalent Units

200151 - Management of Employment Relations, 61428 - Introductory Employment Relations,700030 - Managing People at Work (UWSC), 700091 - Managing People at Work (Creative Industries)

....

'Managing People at Work' provides an introductory framework for the study of employment relations. The unit is approached from a stakeholder perspective, emphasising the way that management, labour and the state, along with other key stakeholders, act, both separately and together, to structure the employment relationship. In doing so, the

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 400

unit integrates industrial relations and human resource management theory and practice, illustrating the links between the two disciplines. The content of the unit is structured so as to provide an initial introduction to the disciplines of industrial relations, human resource management, and employment relations, and to the key stakeholders in the employment relationship. Building on this framework, a theoretical and empirical analysis of employment relations processes is provided, with particular emphasis given to recent changes in the role and perspectives of stakeholders.

200273.5   Managing Service and Experience

Credit Points 10 **Level** 3

Equivalent Units

200564 - Introduction to Sport Management, 400319 - Sport Management 1

....

As service provision becomes increasingly important across a number of industries, some firms are moving beyond the idea of providing a service to providing a total customer experience. Managing Service and Experience introduces students to the exciting concepts of management in the service and experience economy. The unit examines the development of the experience economy and the specialist skills required to manage commercial organisations in the emerging experience economy. Key areas which are covered include: the experience economy, the characteristics of service, service development, service evaluation and service improvement.

200709.2   Managing the Accommodation Experience

Credit Points 10 **Level** 2

Assumed Knowledge

Students are expected to have gained an introductory level of knowledge in hospitality management.

Equivalent Units

200144 - Lodging Management

....

The accommodation sector is an integral part of the hospitality experience. It requires the combination of intangible service and experience with the tangibility of a product which is used by guests. The need to stay competitive in this growing and competitive market creates a need for organisations to look beyond the historical components such as affordability, suitability and luxury. This unit gives students the opportunity to develop an understanding of these accommodation issues as they relate to hospitality organisations.

200710.3   Managing the Food and Beverage Experience

Credit Points 10 **Level** 2

Equivalent Units

200145 - Food Service Systems;

....

The provision of food and beverage is a key component of the hospitality industry and is a prominent feature of the experience economy. Future managers and decision-makers need a thorough knowledge of the nature and characteristics of modern food and beverage service to gain competitive advantage. This unit draws upon traditional gastronomy to examine the role of food and beverage in society. A systems approach to food and beverage service management is then utilised to understand the delivery of a food and beverage experience.

300959.1   Mangamai'bangawarra: Indigenous Science

Credit Points 10 **Level** 2

Assumed Knowledge

Equivalent to a basic understanding of Level 1 introductory biology and chemistry.

....

This unit explores aspects of Aboriginal science and medical science in the treatment and prevention of illness. The unit has a particular focus on the knowledge of the local D'harawal People. The culture and history of Indigenous Australians is introduced to provide a contextual backdrop to the study of Indigenous medical remedies from eastern Australia, the deserts, and the tropics. To complement this study, Indigenous perspectives on the seasons, weather and land management will be studied.

300978.1   Marine and Aquatic Ecology

Credit Points 10 **Level** 3

Assumed Knowledge

Concepts of classification, evolution, taxonomy, cellular processes plant and animal structure and function, normal distribution, representative sampling, probability and uncertainty

Equivalent Units

300465 - Aquatic Ecology, 300929 - Aquatic Ecology

Special Requirements

Students must have completed 80 Credit Points at level 1 and 40 Credit Points at level 2, and wear covered footwear for field excursions.

....

Temperate freshwater, estuarine and marine aquatic ecosystems play vital roles in providing food, water, recreation and other ecosystem services to human society and habitats for important species that make up global biodiversity. Yet aquatic habitats are the most threatened ecosystems on earth, under threat from global climate change and urbanisation. Through inquiry and problem solving this unit will equip students with the necessary techniques in experimental design and analysis needed to investigate aquatic ecosystems and knowledge of the main animal and plants in aquatic and marine ecosystems. The logic and philosophy of science, scientific studies and experimental analyses will be used to understand temperate aquatic ecosystems throughout this unit. On completion students will have the background knowledge and skills communicate to a range of audiences, so that they can contribute beneficially to management and/or

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 401

conservation of waterways and oceans and the biodiversity within.

200086.3   Marketing Communications

Credit Points 10 **Level** 2

Assumed Knowledge

Basic principles of marketing

Prerequisite

200083.2 Marketing Principles

....

Developing and managing an effective integrated marketing communications (IMC) program is a vital part of successful marketing. Moreover, IMC is a highly visible and demanding aspect of marketing communication effort at brand level. This unit, grounded in marketing principles, provides students with an understanding of IMC, the marketing communication process, and coordinating major elements of the marketing communications mix – advertising, digital marketing, sales promotions, personal selling, sponsorship marketing, public relations, direct marketing.

200096.3   Marketing Planning Project

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of marketing concepts including the elements of consumer behaviour, marketing research methods, marketing communications, channel management and distribution, brand and product management, competitive strategy and quantitative methods in marketing. The basics of economics, finance and accounting, mathematics and statistics and general communications are also assumed.

Prerequisite

200083.2 Marketing Principles

Equivalent Units

61734 - Marketing Project, MK311A - Marketing Planning Project

....

Marketing planning project (MPP) assimilates and builds on the wide range of marketing units that students have previously completed. MPP assimilates students' specialist knowledge developed in other units through the use of a 'real-life' case context in which students demonstrate their mastery of marketing in the development and presentation of a professional marketing plan.

200083.2   Marketing Principles

Credit Points 10 **Level** 1

Equivalent Units

61711 - Marketing Principles, 700001 - Marketing Principles (UWSC), 700089 - Marketing Principles (Creative Industries)

Special Requirements

External offerings for this unit are only available to students who are enrolled in Property course, Key Program or Major.

....

Marketing Principles is an introductory marketing course that delivers an overview of the marketing process and how it works within the field of business. This unit examines how organisations use marketing decisions to satisfy customer needs and deliver value. Areas of study include market segmentation and positioning; market planning; product decisions and new product development; branding; customer decision processes, channels of distribution; promotion and advertising; pricing strategies; and customer information management. The unit provides a foundation for those students in the marketing major; however it also provides a broad overview for those who seek a general understanding of the topic.

200592.2   Marketing Research

Credit Points 10 **Level** 2

Assumed Knowledge

Basic principles of marketing, consumer behaviour and statistics.

Prerequisite

200032.5 Statistics for Business AND **200083.2** Marketing Principles

Equivalent Units

200085 - Fundamentals of Marketing Research

....

Marketing Research provides a comprehensive appreciation of the methods, uses and limitations of contemporary marketing research. The emphasis is on a conceptual understanding of research method. Students gain exposure to concepts such as research design, information collection, data processing and analysis, and results communication involving qualitative and quantitative techniques.

200472.3   Material Science in Construction

Credit Points 10 **Level** 2

....

This unit deals with the behaviour of building materials and products in the construction context, including concrete, timber, metal, composites and polymers. An introduction will be given first on how material behaviour and properties are affected by micro-structure, composition and environment. Materials will be discussed in detail according to their physical properties and how they degrade in context. We will also discuss how the materials are manufactured and used and what their environmental impacts are.

200022.3   Mathematical Modelling

Credit Points 10 **Level** 3

Assumed Knowledge

Matrix algebra and how to find eigenvalues and eigenvectors.

Prerequisite

200030.2 Differential Equations

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 402

....

Mathematical Modelling is about solving real world problems. The real world is a complicated place which we often need or want to understand better. One way to do this is to set up a mathematical model which we hope can provide insights, predictions and a greater understanding of a complex system. Selected real-world problems are approximated by mathematical models that are amenable to being written in terms of linear and non-linear equations or differential equations. Once equations are solved emphasis is placed on interpreting solutions, modifying models as required and using models for prediction.

300672.2   Mathematics 1A

Credit Points 10 **Level** 1

Assumed Knowledge

Mathematics achieved at Bands 5-6, or knowledge equivalent to 300830 Analysis of Change.

Equivalent Units

200189 Concepts of Mathematics

Incompatible Units

200195 Mathematical Methods A, 200196 Mathematical Methods B, 14505 Engineering Mathematics 1, 200031 Mathematics for Business, 200237 Mathematicss for Engineers 1, 200191 Fundamentals of Mathematics

Special Requirements

Students are required to have a Scientific calculator and access to a computer with mathematical software packages installed. Students may complete the three units Quantitative Thinking, Analysis of Change and Maths 1A in the following order: 300831 Quantitative Thinking, 300830 Analysis of Change, 300672 Mathematics 1A. This means that students may complete 300831 before attempting 300830, but not after. 300830 and 300831 may be attempted before 300672, but not after. Students may not enrol in 300831 and 300830 or 300831 and 300672 or 300830 and 300672 in the same teaching session. Students enrolled in the 3621 Bachelor of Engineering or 3664 Bachelor of Engineering Science may not enrol in any of the units 300830, 300831 or 300672.

....

This Level 1 unit provides a solid foundation in the theory and applications of differential calculus, as well as some introductory work on complex numbers. It is the first of two units developing aspects of calculus.

300673.2   Mathematics 1B

Credit Points 10 **Level** 1

Prerequisite

300672.2 Mathematics 1A

Equivalent Units

200189 - Concepts of Mathematics

Incompatible Units

200195 - Mathematical Methods A, 200196 - Mathematical Methods B, 14505 - Engineering Maths 1, 200031 - Mathematics for Business, 200237 - Mathematics for Engineers 1

Special Requirements

This unit is not available to students enrolled in 3621 Bachelor of Engineering and 3664 Bachelor of Engineering Science.

....

This Level 1 unit provides a solid foundation in the theory and applications of integral calculus, as well as some introductory work on linear algebra and infinite sequences and series. It is the second of two units developing aspects of calculus.

700146.3   Mathematics 2 (WSTC Prep)

Credit Points 10 **Level** Z

Assumed Knowledge

Mathematics year 10 equivalent.

Equivalent Units

900086 - Mathematics 2 (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Non-programmable scientific calculators are required.

....

This unit has been specifically designed for students who need to refresh or upgrade their understanding of basic mathematical concepts taught in high school mathematics. The topics include basic arithmetic and algebra, functions, geometry, trigonometry, coordinate geometry, indices, logarithms and introductory calculus.

700203.2   Mathematics 3 (WSTC Prep)

Credit Points 10 **Level** Z

Prerequisite

700146.2 Mathematics 2 (UWSCFS)

Equivalent Units

900087 - Mathematics 3 (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students must have a non-programmable scientific calculator.

....

This unit is designed to prepare students for further mathematical study at first year university level. It provides a comprehensive introduction to the study of calculus and its applications in the real world. The concepts studied also include arithmetic and geometric series, trigonometry, inverse trigonometric functions, vectors and matrices.

200237.4   Mathematics for Engineers 1

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics achieved at Band 5 or 6. This is the minimum requirement.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 403

Equivalent Units

14505 Engineering Mathematics 1; 200195 Mathematical Methods A; 200196 Mathematical Methods B; 700019 Mathematics for Engineers 1 (UWSC); 700101 Mathematics for Engineers 1 (UWSC Assoc Deg)

Incompatible Units

200031 Mathematics for Business; 200189 Concepts of Mathematics; 300672 Mathematics 1A; 300673 Mathematics 1B

Special Requirements

Students enrolled in 3689 Bachelor of Engineering must have passed 300743 Mathematics for Engineers Preliminary otherwise permission is required.

....

This unit is the first of two mathematics units to be completed by all students enrolled in an engineering degree during their first year of study. The content covers a number of topics that underpin the later-stage engineering mathematics units. The subject matter includes: differential and integral calculus of a single variable, complex numbers, aspects of matrix algebra, vectors, and some elementary statistics and probability theory. The aim of this unit is to introduce a number of key mathematical concepts needed in the study of Engineering, and to provide a solid foundation for the follow-on unit Mathematics for Engineers 2.

700019.7   Mathematics for Engineers 1 (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

200237 - Mathematics For Engineers 1, 700101 - Mathematics for Engineers 1 (WSTC Assoc Deg)

Incompatible Units

300672 - Mathematics 1A, 300673 - Mathematics 1B, 200191 - Fundamentals of Mathematics

Special Requirements

Students must be enrolled at Western Sydney University, The College unless specific permission has been granted by the School of Computing, Engineering and Mathematics. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisite: Students must pass 700100 Mathematics for Engineers Preliminary before enrolling in this unit - Note: this pre-requisite does not apply to students in courses 7006 Diploma in Engineering or 7010 Diploma in Engineering Fast Track.

....

The content of this unit covers a number of topics that underpin the later-stage engineering mathematics units. The subject matter includes: differential and integral calculus of a single variable, complex numbers, aspects of matrix algebra, vectors and some elementary statistics and probability theory.

200238.2   Mathematics for Engineers 2

Credit Points 10 **Level** 1

Prerequisite

200237.3 Mathematics for Engineers 1

Equivalent Units

14506 - Engineering Mathematics 2; 700022 Mathematics for Engineers 2 (UWSC); 700102 Mathematics for Engineers 2 (UWSC Assoc Deg)

....

This unit is the second of two mathematics units to be completed by students enrolled in an Engineering degree during their first year of study. The content covers a number of topics that build on the calculus knowledge from Mathematics for Engineers 1. The subject matter includes: ordinary differential equations, Laplace transforms and multi-variable calculus.

300743.2   Mathematics for Engineers Preliminary

Credit Points 10 **Level** 1

Equivalent Units

700100 - Mathematics for Engineers Preliminary (UWSC), 700103 - Mathematics for Engineers Preliminary (UWSC Assoc Deg)

Incompatible Units

200195 - Mathematical Methods A, 200191 - Fundamentals of Mathematics, 200237 - Mathematics for Engineers 1, 700019 - Mathematics for Engineers 1 (UWSC)

Special Requirements

Only those students enrolled in the Bachelor of Engineering or Bachelor of Engineering (Honours), who do not have a mathematical background equivalent to NSW HSC Mathematics, achieved at Band 4 or higher, should enrol in this unit. This unit is specifically designed to complement the existing unit 200237 Mathematics for Engineers 1.

....

This unit is specifically designed for students enrolling in the Bachelor of Engineering degree course, who do not have a mathematical background in differential and integral calculus. The content of the unit consists of topics in arithmetic and algebra, trigonometry and trigonometric functions, logarithmic and exponential functions, differential and integral calculus.

700100.3   Mathematics for Engineers Preliminary (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300743 - Mathematics for Engineers Preliminary, 700103 - Mathematics for Engineers Preliminary (WSTC Assoc Deg)

Incompatible Units

200191 - Fundamentals of Mathematics

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 404

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7034 Diploma in Engineering or 7033 Bachelor of Engineering (WSTC First Year Program) must pass 700146 Mathematics 2 before enrolling in this unit; students enrolled in 7066 Diploma in Engineering Extended must pass 700203 Mathematics 3 before enrolling in this unit.

....

This unit covers the fundamental mathematical concepts and techniques necessary for the study of Engineering. Topics include Arithmetic and Algebra, Trigonometry, Functions, and Introductory Differential and Integral calculus.

301077.1   Mathematics for Industrial Design

Credit Points 10 **Level** 1

Assumed Knowledge

Students should have assumed knowledge of any two units of English plus at least two units of Business Studies, Visual Arts, Physics or HSC Mathematics.

Equivalent Units

200191 - Fundamentals of Mathematics

....

This unit builds confidence and fluency in applying mathematical skills in the context of design work. Students will practice measuring and calculating the areas and volumes of manufactured objects and proposed designs. They will use trigonometry to develop 2D and 3D scale drawings and will use statistics to inform designs, for example for ergonomics. They will explore the geometry of curves and will be introduced to the use of mathematical symmetries, sequences and patterns as design tools. Basic matrix operations and linear algebra are a foundation for design work involving software algorithms.

200413.3   Mathematics Honours Thesis

Credit Points 40 **Level** 5

Special Requirements

Students must be enrolled in a Bachelors honours course and have understanding and knowledge equivalent to an undergraduate Bachelor of Science (Mathematics) degree or key program in Mathematics/Statistics. Students must have a grade point average greater than 5 unless a case can be made.

....

The aim of this unit is to further develop the student's research and problem solving skills. The student is required to implement the research plan, complete a substantive piece of research in the field of Mathematics/Statistics, and to communicate the results of that work to an interested and technically literate audience. All projects will therefore contain at least two broad areas of assessment: the substantive work itself, and the oral and written communication of the work to others. All assessment components submitted in both of these areas are expected to be of a high professional standard. Students will present their research in the thesis. The thesis topic and structure will vary according to the area of interest of the student and the expertise of the supervisor. Throughout this unit regular planned consultations between the student and supervisor will occur. Students are expected to work to a schedule devised in consultation with their supervisor. The schedule will include set dates for the presentation of draft chapters for review by the supervisor.

300764.1   Mechanical Design

Credit Points 10 **Level** 3

Assumed Knowledge

This subject assumes that the student has undertaken first and second year studies in UWS engineering courses or equivalent.

Prerequisite

300040.1 Mechanics of Materials AND **300035.2** Kinematics and Kinetics of Machines

Equivalent Units

300478 - Design of Servo-Systems

....

This unit introduces students to the design of machine components. The unit covers the design of components to ensure their functionality, strength and durability. Components designed include drive components,gears, shafts,belt drives, and bearings and structural components, welds and treaded fasteners.

300040.2   Mechanics of Materials

Credit Points 10 **Level** 2

Prerequisite

300463.2 Fundamentals of Mechanics

Equivalent Units

300039 Mechanics and Materials; 700116 Mechanics of Materials (UWSC Assoc Deg)

....

Mechanics of Materials is the study of the stresses and deformation of a body made of any elastic solid material, and how these are related to the bodys shape and the load applied to it. This unit looks at how and why structural components including bars and beams deform and break. It concentrates on how these are affected by the geometry of the body and loading. Types of loadings considered include normal loads, torsional loads and bending loads. The main objective of the unit is to introduce students to the aspects of stress, strain and internal force development in the components and the methods to determine the deformation and deflections of the components. Energy methods and impact loadings are also considered.

300487.3   Mechatronic Design

Credit Points 10 **Level** 3

Prerequisite

300040.2 Mechanics of Materials

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 405

Equivalent Units

300041 - Mechatronic Design 1, 300042 - Mechatronic Design 2

....

The aim of the unit is to integrate basic skills of mechanics, mechanical systems, and automation in the practice of engineering design (Design for X and system engineering) as applied to mechatronic devices and systems. The ability to perform detailed design analysis on important machine elements as bearings, brakes, clutches, shaft and motor in a system is the intended outcome of undertaking this unit and project-based tasks wil form part of the learning process to build up team work experience.

101925.1   Mediated Mobilities

Credit Points 10 **Level** 1

Equivalent Units

101041 - Communication Research, 700181 - Mediated Mobilities (UWSC)

....

This unit explores 'mediated mobilities'; in other words, the way mediated communication and representations are shaped by mobility, and the ways that practices and experiences of mobility are mediated. The characteristics of mediated mobilities are investigated as well as the implications of the interactions of mediated communication and mobility in different cultural and social contexts. These contexts include knowledge production, political and cultural organization, policy settings, digital networked media, contexts of personal expression and identity (such as social media) and activism.

300826.1   Medical Microbiology

Credit Points 10 **Level** 3

Prerequisite

300833.1 Microbiology 1 AND **300896.1** Microbiology 2

Equivalent Units

300233 - Medical Microbiology, 300749 - Medical Microbiology

....

Infectious diseases worldwide are the most common cause of illness. Medical microbiology is subdivided into four areas: virology, bacteriology, mycology (the study of fungi) and parasitology. The rapid evolution of microbes means that this is an area that does not remain static. This unit has a modern approach to the study of the balance between the host, humans, and the very large army of potential invaders. Students will embark on a journey into the world of pathogenic micro-organisms exploring the molecular mechanisms by which these override host defences leading to disease. Infectious diseases of the human body systems as well those of the immunocompromised and infections contracted in the healthcare setting (nosocomial) are discussed. The theory will be supported with laboratory experience representing diagnostic procedures for the identification of infectious agents.

400813.2   Medical Research Project

Credit Points 60 **Level** 3

Assumed Knowledge

Knowledge from successful completion of years 1 and 2 of Bachelor of Medicine, Bachelor of Surgery (MBBS).

Prerequisite

400861.1 Foundations of Medicine 1 AND **400862.1** Foundations of Medicine 2

Special Requirements

COREQUISITE: Must pass two of the following- 300786 Methods of Scientific Researching, 400864 Research Methods (Quantitative and Qualitative), 400863 Foundations of Research and Evidence-Based Practice. This program requires the background of at least two years of a medical degree before it can be successfully attempted. It will therefore be available only to currently enrolled UWS medical students as part of an intercalated year leading the Bachelor of Medical Research. If any clinical work is to be undertaken as part of the research project, the students will need to continue to meet the same requirements for immunisation and child protection as for all other students in the medical course.

....

This unit is the principal component in the Bachelor of Medical Research. It aims to give students, enrolled in the UWS MBBS, the opportunity to develop their critical thinking and gain a more detailed experience in medical research than is provided in the medical course. It consists of a research project in any area of medical research for which the School can provide suitable supervision. Students will study the relevant literature, develop and conduct the program of research with the assistance of their supervisor, take part in research seminars in their research group, and present the results as a dissertation.

300892.1   Medical Science Project

Credit Points 10 **Level** 3

Equivalent Units

300542 - Biomolecular Science Project

Special Requirements

Student must be enrolled in 3577 Bachelor of Medical Science, 3673 Bachelor of Medical Science, 3674 Bachelor of Medical Science (Nanotechnology) or 3682 Bachelor of Medical Science (Advanced). Successful completion of 80 credit points at Level 2 or 3.

....

Students will undertake a short research project specific to the field of Medical Science. This will involve undertaking a review of the literature and generating appropriate hypotheses that will subsequently be tested and analysed. Findings will be presented orally and as a written manuscript.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 406

401095.1 Mental Health and Substance Abuse

Credit Points 10 **Level** 2

Prerequisite

401067.1 Paramedic Practice 1

Corequisite

401068.1 Paramedic Practice 2

Special Requirements

Student must be enrolled in 4669 Bachelor of Health Science (Paramedicine)

....

This unit introduces students to mental health and behavioural presentations, and emergencies arising from legal and illegal substance use. Students will explore the epidemiology, pathophysiology, manifestation, recognition, assessment and management of common mental health problems, behavioural presentations, and cases involving legal and illegal drug use in the context of paramedicine. Students will practice techniques for managing these presentations from an interpersonal communication perspective and a clinical management perspective. Acute and sub-acute presentations will be discussed, with specific attention given to the role of the paramedic regarding risk assessment, counselling, and health promotion. Legalities associated with management of behaviourally disturbed or cognitively impaired patients will be discussed, and issues relating to multi-agency care, collaboration and co-operation will be examined.

300848.1 Metabolism

Credit Points 10 **Level** 2

Prerequisite

300936.1 Functional Proteins and Genes

Equivalent Units

300220 - Biochemistry 2; 300548 - Human Metabolism & Disease

Incompatible Units

300227 - General Biochemistry

....

Organisms degrade food molecules to generate energy and converts excess food molecules into internal fuel stores. This unit will cover topics including: bioenergetics; the structures of key molecules; glycolysis, gluconeogenesis, glycogen synthesis and breakdown; fatty acid oxidation and synthesis; amino acid catabolism; urea synthesis; citric acid cycle; electron transport and oxidative phosphorylation. Emphasis will be on the regulation and integration of these pathways, including their responses to hormonal regulation. The effects of altered dietary and hormonal status on metabolic pathways and their consequences for the organism will be discussed.

101909.1 Methods of Reading

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit aims to build the skills of reading, interpretation and theoretical and contextual analysis that are critical to the study of literary texts, skills that define scholarship in the discipline of English. Focusing on a sustained and careful study of a small number of literary texts the unit provides an in-depth exploration of technical approaches to close reading, cultural and historical contexts for the production and reception of the texts, and different theoretical approaches to their interpretation. The selected primary texts (one novel, one play and a selection of poems) will span two or three literary/historical periods.

300768.2 Methods of Scientific Researching

Credit Points 10 **Level** 7

Assumed Knowledge

Appropriate background in a scientific discipline to conduct research in that area. No previous research experience is required.

Equivalent Units

SC809A - Research methodology and experimental design, 14429 - Science research project, proposal and seminar, 300411 - Research methodology and experimental design

Incompatible Units

300398 - Methods of Researching

Special Requirements

Students must be enrolled in a postgraduate degree.

....

This unit introduces students to the principles and tools of scientific research. It is designed for students who are undertaking Master of Science and those who have not previously undertaken training in research. Students attend a series of classes covering topics such as critical thinking, problem definition, formulation and testing of hypotheses, analysis of quantitative and qualitative results, communication of research findings, bibliographic techniques and advanced information retrieval methods. Students are required to prepare an intention to research, an annotated bibliography, seminar, and a research poster.

300833.1 Microbiology 1

Credit Points 10 **Level** 2

Prerequisite

300802.1 Biodiversity OR **300816.1** Cell Biology

Equivalent Units

300300 - Microbiology 1

Incompatible Units

300331 - General Microbiology

....

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 407

In this unit students will use an inquiry-based approach to explore the origin and diversity of microorganisms and their significance in the environment, in foods and industry as well as in health and disease. Students will be introduced to the structure, reproduction, classification, cultivation and enumeration of bacteria, viruses, fungi and protists. The conditions required for growth and survival of microorganisms will be studied as well as physical and chemical methods of control. In laboratory classes students will develop skills in culturing and observing microorganisms and in designing experiments to test microbiological concepts. This unit is a pre-requisite for Microbiology 2 and Level 3 Microbiology units.

300896.1 Microbiology 2

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of the major groups of microorganisms and their structure and functions including DNA and key metabolic pathways.

Prerequisite

300833.1 Microbiology 1

Equivalent Units

300321 - Microbiology 2

....

The unit focuses on the origins of genetic variation and the process of gene regulation in prokaryotes and explores the metabolic diversity of microorganisms from a variety of habitats and their application in industry. Using published scientific literature, students will learn how scientists research functional microbial physiology in the postgenomic era. The principles and applications of recombinant DNA techniques are discussed. Classification and identification of bacteria and yeasts is presented, including an introduction to molecular systematics. Laboratory classes introduce students to techniques used to study microbial physiology and genetics.

300044.2 Microcontrollers and PLCs

Credit Points 10 **Level** 2

Prerequisite

300025.2 Electronics OR **300021.1** Electrical Fundamentals

....

The aim of this unit is for students to develop an understanding of the hardware, architecture and the assembly language of microcontrollers and to control a mechanical system with a programmable logic controller (PLC). The unit looks at the applications of timers, interrupts and serial ports. Furthermore, the general approach in designing a microcontroller in mechanical systems will be studied. It uses an Omron PLC to control a factory represented by four pneumatic cylinders. After covering the Ladder Logic programming language, it moves on to cover sequential programming and numerical manipulation using PLCs.

200530.3 Microeconomic Theory and Applications

Credit Points 10 **Level** 3

Prerequisite

200525.2 Principles of Economics OR **200052.4** Introduction to Economic Methods

Equivalent Units

200058 - Industry Economics and Policy

....

In 2016, this unit replaced by 200923 - Corporations, Economic Power and Policy. The aim of Microeconomic Theory and Applications is to extend students' knowledge of microeconomic theory developed in Principles of Economics. After a more formal presentation, the rather idealistic assumptions used in the context of the perfectly competitive markets will be relaxed in order to model typical situations encountered in the business world. The theory of choice will be extended to situations where individuals face uncertainty regarding the outcome of their own actions. In terms of market structure, we will investigate the consequences in terms of price, quantity and consumer's surplus, of monopoly, oligopoly or duopoly markets. As some of these market structures imply that the individuals' decisions might strongly affect or be affected by a limited number of other decision makers, an introduction to Game Theory will be presented. Finally, our concerns for investigating more realistic economic situations will lead us to make a brief incursion into markets characterised by asymmetric information, the presence of public goods or the existence of externalities.

300076.3 Microprocessor Systems

Credit Points 10 **Level** 2

Prerequisite

300018.2 Digital Systems 1

Equivalent Units

84137 - Microprocessor Systems

....

This unit introduces students to the internal structure of microprocessors and its fundamental operations. Topics include assembly language programming, interrupt processing, CPU functions, memory organization, and peripheral programming. Intel 8088 microprocessor will be discussed in great detail. Embedded processor will also be covered.

401030.1 Midwifery Knowledge 1

Credit Points 10 **Level** 1

Corequisite

401002.1 Bioscience 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit introduces students to the meaning of birth in society and the historical and social contexts of midwifery,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 408

from its early beginnings, to its current professional standing. The philosophy of midwifery and the role of the midwife within a continuity of care framework will be explored including approaches for working in partnership with women and their families. Students will investigate, identify and access scientific information and research in order to develop academic literacy at a beginning level; identify the principles of communication and consent; and explore issues related to professional behaviour and educational resources for childbirth.

401032.1   Midwifery Knowledge 2

Credit Points 10 **Level** 1

Prerequisite

401030.1 Midwifery Knowledge 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit introduces students to midwifery knowledge for childbirth within a woman centred partnership model. It provides the theoretical foundations to equip students in understanding the role of the midwife during pregnancy, labour and birth and the initial care of the newborn. The educational, psychological and social needs of women are explored and integrated with learning from the Bioscience for Midwifery unit. The unit briefly introduces students to midwifery care related to the postnatal and newborn period including lactation and breastfeeding.

401034.1   Midwifery Knowledge 3

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge from all Year 1 core units from the Bachelor of Midwifery.

Prerequisite

401032.1 Midwifery Knowledge 2

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery.

....

This unit provides students with the midwifery knowledge related to the postnatal period. It will focus on maternal postnatal and newborn care including infant feeding, bonding and attachment. Breastfeeding is a core maternity indicator and is a focus for improving public health. Midwifery skills and knowledge to assist women in the preparation, initiation and establishment of breastfeeding will be examined as well as the historical and social contexts of infant feeding and challenges that this and other problems may pose for women. The midwives role in supporting women who are breastfeeding is addressed including the need to offer consistent evidence-based information.

401043.1   Midwifery Practice - Models of Care

Credit Points 10 **Level** 3

Prerequisite

401038.1 Midwifery Practice Experience 3 AND **401036.1** Complex Care 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer for some placements within The Justice Health & Forensic Mental Health Network. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number, ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number, iii. Submit the letter with a valid Working with Children Check number to the School of Nursing and Midwifery to facilitate processing of a school placement if requested; 2). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3). Adult Health Immunisation Schedule; 4). Code of Conduct Agreement; 5). First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

In this unit students will undertake a three week practice placement. The purpose of this placement is for students to experience an alternative model of midwifery care which can be in an urban, rural or international setting.

401041.1   Midwifery Practice - Teaching and Learning

Credit Points 10 **Level** 3

Prerequisite

401036.1 Complex Care 1 AND **401038.1** Midwifery Practice Experience 3

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must hold 1). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer for some placements within The Justice Health & Forensic Mental Health Network. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number, ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number, iii. Submit the letter with a valid Working with Children Check number to the School of Nursing and Midwifery to facilitate processing of a school placement if requested; 2). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3). Adult Health Immunisation Schedule; 4). Code of Conduct Agreement; 5). First Aid Certificate.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 409

Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

In this unit students will gain knowledge of adult education principles and skills in facilitating learning in a range of hospital-based and community settings, including group antenatal care and childbirth and parenting education sessions. In addition students will gain knowledge and skills in facilitating student learning and will begin to understand their role in teaching and learning as a registered midwife.

401033.1 Midwifery Practice Experience 1

Credit Points 10 **Level** 1

Prerequisite

401045.1 Introduction to Midwifery Practice Experience

Corequisite

401032.1 Midwifery Knowledge 2

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. As per NSW Health and UWS: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3). Four forms completed and taken to every placement (with a copy) - a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace. Essential Equipment: Calculator, UWS Midwifery Uniform for Clinical Placement and final skill assessment, and a watch with a second hand. Access to a computer and the internet is essential in order to be able to: access course materials; to participate in discussion groups; and to access additional resources provided by the lecturer during the session.

....

In this unit students will develop skills for the provision of midwifery care across the birthing continuum. The primary focus of this unit will be the acquisition of skills for supporting women during normal pregnancy and birth. Students will apply knowledge gained from Midwifery Knowledge 1 and 2 in simulated practice environments and will gain a comprehensive understanding of the practical aspects of midwifery care for women experiencing normal labour and birth. Students will gain practical experience in designated clinical areas and will follow women through pregnancy, birth and the postnatal period in a continuity of care experience.

401035.1 Midwifery Practice Experience 2

Credit Points 10 **Level** 2

Prerequisite

401033.1 Midwifery Practice Experience 1 AND **401031.1** Bioscience for Midwifery

Corequisite

401034.1 Midwifery Knowledge 3

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. Students must have the following. 1). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. Ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. Iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; 2). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3). Adult Health Immunisation Schedule; 4). Code of Conduct Agreement; 5). First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived. Essential Equipment: Calculator, UWS Midwifery Uniform for Clinical Placement and final skill assessment, and a watch with a second hand. Access to a computer and the internet is essential in order to be able to: access course materials; to participate in discussion groups; and to access additional resources provided by the lecturer during the session.

....

In this unit students will learn the necessary midwifery skills for the provision of woman centred post birth care. In a simulated practice environment students will gain practical skills to provide midwifery care to both the woman and her baby up until six weeks postpartum. The importance of effective communication and documentation will also be reinforced. This unit will also include blocks of practical experience in designated clinical areas and the provision of continuity of care.

401038.1 Midwifery Practice Experience 3

Credit Points 10 **Level** 2

Prerequisite

401035.1 Midwifery Practice Experience 2

Corequisite

401036.1 Complex Care 1

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. As per NSW Health and UWS: First Aid Certificate.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 410

Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3). Four forms completed and taken to every placement (with a copy) - a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace. Essential Equipment: Calculator, UWS Midwifery Uniform for Clinical Placement and final skill assessment, and a watch with a second hand. Access to a computer and the internet is essential in order to be able to: access course materials; to participate in discussion groups; and to access additional resources provided by the lecturer during the session.

....

In this unit students will develop the necessary skills to provide midwifery care to women with complex health needs. In lab based simulation environments students will gain confidence in providing midwifery care following the detection of deviations from normal. Students will gain practical experience in designated clinical areas and will follow women through pregnancy, birth and the postnatal period in a continuity of care experience.

401042.1   Midwifery Practice Experience 4

Credit Points   10 **Level**   3

Prerequisite

401038.1 Midwifery Practice Experience 3

Corequisite

401039.1 Complex Care 2 AND **401040.1** Collaborative Care

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. As per NSW Health and UWS: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3). Four forms completed and taken to every placement (with a copy) - a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an

online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace. Essential Equipment: Calculator, UWS Midwifery Uniform for Clinical Placement and final skill assessment, and a watch with a second hand. Access to a computer and the internet is essential in order to be able to: access course materials; to participate in discussion groups; and to access additional resources provided by the lecturer during the session.

....

In this unit students will further develop midwifery skills for the management of complications and emergency situations. In simulated practice environments students will gain the skills necessary to work collaboratively with interdisciplinary colleagues. Students will gain practical experience in designated clinical areas and will follow women through pregnancy, birth and the postnatal period in a continuity of care experience.

401044.1   Midwifery Practice Experience 5

Credit Points   10 **Level**   3

Prerequisite

401042.1 Midwifery Practice Experience 4 AND **401039.1** Complex Care 2 AND **401040.1** Collaborative Care AND **401041.1** Midwifery Practice - Teaching and Learning

Special Requirements

Students must be enrolled in 4684 Bachelor of Midwifery. As per NSW Health and UWS: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3). Four forms completed and taken to every placement (with a copy) - a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace. Essential Equipment: Calculator, UWS Midwifery Uniform for Clinical Placement and final skill assessment, and a watch with a second hand. Access to a computer and the

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 411

internet is essential in order to be able to: access course materials; to participate in discussion groups; and to access additional resources provided by the lecturer during the session.

....

This unit provides the opportunity for students to consolidate their knowledge and midwifery skills in preparation for their role as a midwife. Students will be assessed across the four competency domains of legal and professional practice, midwifery knowledge and practice, midwifery as primary health care and reflective and ethical practice. Students will gain practical experience in designated clinical areas and will follow women through pregnancy, birth and the postnatal period in a continuity of care experience.

300960.3 Mobile Applications Development

Credit Points 10 **Level** 3

Special Requirements

Pre-requisite: For students enrolled in 3639 Bachelor of Information and Communications Technology and 3684 Bachelor of Information and Communications Technology (Advanced) the pre-requisite is 300581 Programming Techniques. For students enrolled in 3687 Bachelor of Information Systems or 3688 Bachelor of Information Systems Advanced the pre-requisite is 300582 Technologies for Web Applications. For students enrolled in 3506 Bachelor of Computer Science the pre-requisite is 300147 Object Oriented Programming OR 300582 Technologies for Web Applications. Co-requisite: 300147 Object Oriented Programming for students enrolled in 3506 Bachelor of Computer Science.

....

This unit teaches technologies and programming languages for developing applications on common mobile platforms, such as Android and iOS. Students will learn skills for developing programs on the above platforms, along with in-class sample applications that highlight platform-specific implementation details.

300043.4 Mobile Robotics

Credit Points 10 **Level** 4

Prerequisite

300463.2 Fundamentals of Mechanics

Special Requirements

Students must pass 160 credit points before enrolling in this unit.

....

To develop an understanding of the basic concepts involved in Mobile Robotics. The areas of mobile robot mechanics, localisation, map building and path planning of mobile robots will be introduced. Various sensors and their applications in mobile robotics are also to be introduced.

101978.1 Modern Australian Poetry and Poetics

Credit Points 10 **Level** 2

Equivalent Units

63270 - Poetry and Poetics, 100880 - Poetry and Poetics

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit examines Australian poetries of the 20th and 21st centuries in context of parallel events in international poetry. It looks at histories and definitions of poetic 'innovation' and asks how Australian poetry has dealt with different waves of modernism. It studies dialogues between local and international avant-gardes, and surveys new poetic genres emerging in online environments. The unit aims to enrich students' critical understanding of poetry and poetics, and where relevant, to enhance their own creative writing practice. Topics addressed include poetic tradition and counter-tradition; form and experiment; colonialism, exile and belonging; literary communities; critical histories; digital and e-poetries.

102000.1 Modern European History and Politics

Credit Points 10 **Level** 1

....

This unit introduces students to the major events and ideas that have shaped Europe in the late modern period. There is a strong focus on the dramatic events of the twentieth century following the demise of empire, and the subsequent rise of competing nationalisms and radical politics. The unit is concerned equally with the cultural and social contexts in which these events occurred. Students will study the diverse ways in which historians have approached the history of the twentieth century from the study of high politics to the focus on daily life. Methodological questions that will be addressed include the relative role of individual agency and of structural constraints in explaining historical change. The unit will encourage students to evaluate the period as a whole drawing on scholarship which engages the modernity - democracy - violence nexus.

100271.3 Modern Japanese History

Credit Points 10 **Level** 3

Equivalent Units

63036 - Themes in Asian History

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit presents a social and cultural history of Japan from the mid nineteenth century to the present. The principle organising theme is the question of modernity: what are the different ways that Japan has expressed its modern identity? How has this been shaped by Japan's position in relation to both the West and its Asian

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 412

neighbours? What is the relationship among the state, its citizens, and history in negotiating identity? How has war affected Japanese modernity and what we know of modern Japan?

101033.4 Modernism

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit aims to introduce students to important works of literature from the earlier part of the 20th century. Throughout the course we will be concentrating on literature but will make reference to other art forms (in particular the visual arts) to provide the intellectual context necessary to understanding the ideas of the period. There will be a close study of a small number of important novels or works of poetry from the period, with a close consideration of techniques of writing and the way these techniques contribute to an understanding of the themes in the works.

101001.3 Modernity and Cinema

Credit Points 10 **Level** 3

Equivalent Units

VP215A - Modernity and Cinema

Special Requirements

Successful completion of 60 credit points

....

This unit will engage with the question of how social and aesthetic issues interact in films by examining specific questions which are related to cinema history. Issues of identity will be used to focus upon the ways in which historical contexts interrelate with artistic practice. The unit will consider the process of creating emotions, the consideration of techniques of production and the manipulation of cinema language, the use of narrative or non-narrative form to convey the sense of reality, (or the unreal, the uncertain).

300817.1 Molecular Biology

Credit Points 10 **Level** 2

Prerequisite

300936.1 Functional Proteins and Genes OR **300845.1** Genetics OR **300848.1** Metabolism

Equivalent Units

300234 - Molecular Biology, 300549 - Human Molecular Biology

Special Requirements

Laboratory safety glasses

....

Molecular biology is central to many fields of the biomedical and natural sciences, and includes genetics, immunology, cell biology, biochemistry, and forensics. Through comparative studies of different organisms, this unit will describe fundamental concepts and methods in the study of DNA and RNA and the application of molecular biology in advanced fields such as genomics. Subjects will include DNA replication; transcriptional, post-transcriptional and epigenetic regulation of gene expression; microarrays, and an introduction to bioinformatics. Practical work will provide opportunities to become familiar with the methods of molecular biology, with an emphasis on the development of problem solving and analytical skills

300927.2 Molecular Medicine

Credit Points 10 **Level** 3

Equivalent Units

300551 - Molecular Basis of Disease, 300407 - Mamalian Molecular Medicine

Special Requirements

Students are required to pass two units from the following - 300820 - Genes, Genomics and Human Health, 300845 - Genetics, 300817 - Molecular Biology, 300936 - Functional Proteins and Genes, 300848 - Metabolism, 300850 - Advanced Cell Biology

....

Molecular Medicine is an inquiry based capstone unit that integrates core concepts in molecular and cell biology with a focus on cancer as a framework to discuss autoimmune, infectious and genetic diseases. This unit aims to enhance critical thinking for the professional environment and prepares students for future innovations in prevention, management and cure of catastrophic diseases. Current research, diagnosis, treatment and policy issues, related to health and disease states, are placed in the context of real world experiences and changing imperatives.

300912.1 Molecular Pharmacokinetics

Credit Points 10 **Level** 3

Prerequisite

300849.1 Physical Chemistry

Equivalent Units

300475 - Molecular Pharmacokinetics

Special Requirements

Students are required to have a laboratory coat and safety glasses.

....

This Unit examines the Kinetics of the bioavailability, degradation and removal of drug molecules from the body and its response to drug structure, stability and delivery system.

400886.2 Motor Control and Skill Acquisition

Credit Points 10 **Level** 2

Prerequisite

400868.2 Human Anatomy and Physiology 1 OR **400869.2** Human Anatomy and Physiology 2 OR **400881.3** Functional Anatomy

Equivalent Units

100679 - Motor Control and Learning

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 413

Special Requirements

Students must be enrolled in course 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

Motor Control and Skill Acquisition is an investigation of the physiological and psychological processes involved in both the control and the learning of movement. As such, it considers the control mechanisms which are innate to the learner, how these mechanisms change by virtue of both maturation and experience, and how the latter type of changes may be facilitated by manipulation of the learning environment.

400886.3   Motor Control and Skill Acquisition

Credit Points 10 **Level** 3

Equivalent Units

100679 - Motor Control and Learning; 400895 - Aquatic Sports

Special Requirements

Students must be enrolled in 4658 - Bachelor of Health Science (Sport and Exercise Science) or 4659 - Bachelor of Health Science (PDHPE) or 4742 - Bachelor of Health Science (Health and Physical Education) Pathway to Teaching (Secondary) or 4747 - Bachelor of Health Science (Health and Physical Education)

....

Motor Control and Skill Acquisition is an investigation of the physiological and psychological processes involved in both the control and the learning of movement. As such, it considers the control mechanisms which are innate to the learner, how these mechanisms change by virtue of both maturation and experience, and how the latter type of changes may be facilitated by manipulation of the learning environment.

400891.2   Movement and Skill Development

Credit Points 10 **Level** 1

Prerequisite

300361.3 Introduction to Human Biology AND **400880.2** Fundamentals of Exercise Science

Incompatible Units

400794 - PDHPE: Exploring Movement Skills, 400796 - PDHPE: Efficient Movement Principles

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (PDHPE) or 4549 - Bachelor of Health Science (PDHPE).

....

This unit examines the scientific basis for movement and sports skill development. An understanding of the principles of movement and motor skill and how they apply to performance is examined through a range of movement tasks required for track and field athletics and some team sports. Laboratory activities will focus upon the basic movement tasks of throwing, jumping, balancing, striking, running and rotary activities. An examination of the

instruments used in efficient movement analysis is undertaken.

401180.1   Musculoskeletal Disorders and Imaging

Credit Points 10 **Level** 2

Assumed Knowledge

Completion of all core units to this semester/year of study is assumed knowledge

Prerequisite

400905.2 Introduction to Podiatry AND **401181.1** Pathomechanics and Podiatric Medicine AND **400881.3** Functional Anatomy

Corequisite

400933.2 Podiatry Pre-Clinical

Incompatible Units

400936 - Podiatric Techniques 1B

Special Requirements

The unit is Podiatry specific and restricted only to students enrolled in courses 4708 Bachelor of Podiatric Medicine and 4709 Bachelor of Podiatric Medicine (Honours). The unit involves clinical hand-on real life experience. Students will be building on previous clinical skills. It is essential that students have been able to demonstrate baseline competencies in theoretical content, patient management, infection control and safe work practices (i.e completed the preceding prerequisite units). To be able to enrol in this unit, all students must have a National Police Certificate, a Working with Children Check, Student Declaration and a First Aid Certificate (including advanced resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. Students must meet all inherent requirements for the podiatry course.

....

This unit will introduce students to clinical and theoretical foundations of musculoskeletal disorders that can impact on the function of the lower extremity and reduce patient quality of life. Musculoskeletal disorders including rheumatic diseases, inflammatory arthropathies, connective tissue disorders, bone disease and tumours will be covered. Advanced assessment evaluation will be taught with a focus on diagnostic imaging techniques including ultrasound, X-rays, magnetic resonance imaging, computer tomography and bone scans. This will assist in the clinical diagnosis of disease processes that present in podiatric settings

400999.3   Musculoskeletal Physiotherapy

Credit Points 10 **Level** 3

Assumed Knowledge

Human anatomy, human physiology, and pathophysiology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 414

Prerequisite

400985.1 Clinical Education A

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4667 Master of Physiotherapy, and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs. Students in courses 4662 Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy are to complete prerequisite unit 400982 - Core Competencies in Physiotherapy Practice. Students in course 4667 Master of Physiotherapy are required to complete prerequisite unit 400987 Neurological Physiotherapy Practice. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

....

This unit focuses on client assessment and treatment using manual physiotherapy techniques. An emphasis is placed on diagnostic reasoning and evaluation, understanding the implications of pathology in a physiotherapy context, prioritising problems and integrating manual therapy with other physiotherapy treatments. This requires strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care.

102343.1   Napoleon: the Making of a Legend

Credit Points 10 **Level** 3

Special Requirements

Student must have completed 60 credit points of study before enrolling in this unit.

....

This unit appraises the achievement of Napoleon Bonaparte and the manner in which he has been portrayed in his own propaganda, by his contemporaries and by historians. It also considers the historical impact of the Napoleonic and anti-Napoleonic myths in the history of France and Europe. At the heart of the module is the paradox of Napoleon's enduring popularity in France, despite his responsibility for crushing defeats in 1812-1814 and again 1815.

102181.2   Nation, Power and Difference

Credit Points 10 **Level** 7

Special Requirements

This unit is only available to Postgraduate students.

....

This unit examines the concepts of nation, power and difference as part of understanding and engaging with difference and diversity. It begins with an examination of different theoretical perspectives on nation from Benjamin Anderson's Imagined Communities to the impact of current economic, technological and social changes such as the

digital revolution in information technology, global financial crises and mass movement of peoples as a result of wars and other crises on the concept of the nation state. Building on this, the unit engages students in an exploration of differences and relations of power focussing on gender, sexuality, and race. Students will examine these relational concepts and the operation of power in the Australian context and have the opportunity within assignments to explore these differences in other nation states. The unit provides students with critical skills and knowledge to critique, engage and intervene in relations of difference in different social and political national contexts.

300932.1   Natural Science Research Methods

Credit Points 10 **Level** 2

Equivalent Units

300290 - Research Communities and their Environments, 300662 - Research Methods, 300561 - Animal Research

Special Requirements

Successful completion of 60 credit points at Level 1.

....

Formulating research questions to solve problems by designing and selecting a systematic methodology to test hypotheses and evaluate evidence are an essential part of research and inquiry. This unit will provide students with the critical thinking skills needed to undertake applied research, especially how to incorporate quantitative and qualitative evidence into arguments. Students will communicate the results of investigations using a variety of modes for different purposes. The ethical, regulatory and risk frameworks for research on human and animals will be discussed including the UWS humans and animal ethics approval process required for research.

301105.1   Negotiation in the Built Environment

Credit Points 10 **Level** 3

Equivalent Units

200485 - Decision Making for Construction Professionals

....

Construction and Property development is the most complex activity in the Australian economy. There are many professional groups involved in the sector. This unit will train students in the negotiation skills required to successfully complete projects from the perspective of a construction manager, building surveyor, planner, civil engineer, construction lawyer and property developer.

200613.2   Negotiation, Bargaining and Advocacy

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Equivalent Units

61430 - Negotiation, Bargaining and Advocacy

....

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 415

In 'Negotiation, Bargaining and Advocacy' students identify and assess contrasting approaches to negotiation and identify the importance of strategy and judgement in negotiation. Students develop their skills through a team-based online negotiation and a critique of the experience of this negotiation. Through case studies, students examine conciliation, mediation and arbitration with a particular focus on advocacy practice in industrial tribunals. An important theme in the unit is the assessment of the contextual and regulatory factors that shape negotiation, bargaining and advocacy practice. This aspect draws on contemporary debates in these spheres most notably concerning the Australian context.

300143.3 Network Security

Credit Points 10 **Level** 3

Assumed Knowledge

Good understanding of the principles of information security, and computer networks and internets.

Prerequisite

300094.2 Computer Networking Fundamentals OR **300565.2** Computer Networking

....

This unit is concerned with the protection of information transferred over computer networks. It includes discussion of techniques for securing data transported over local and wide area networks. At the conclusion of the unit students will have a good understanding of the practical aspects of securing a computer network against internal and external attacks.

300575.2 Networked Systems Design

Credit Points 10 **Level** 3

Prerequisite

300095.3 Computer Networks and Internets

Equivalent Units

300088 - Broadband Networking

....

This unit builds on and consolidates the skills and knowledge gained in Computer Networking and Computer Networks and Internets. Students successfully completing this unit will acquire the necessary design skills and knowledge required to build and configure enterprise scale networks. The unit provides students with an opportunity to develop problem-solving techniques and decision-making skills to resolve networking issues. Students completing this unit and its prerequisites should also now be prepared to attempt world recognized network industry certification (CCNA).

300754.2 Neuroanatomy

Credit Points 10 **Level** 3

Assumed Knowledge

The outcomes of: 300543 Cell Biology, 300554 Principles of Chemistry, 300752 Introduction to Anatomy and Histology, 300753 Introduction to Human Physiology; or

400868 Human Anatomy & Physiology 1, 400869 Human Anatomy & Physiology 2; or equivalent units.

Equivalent Units

300322 - Neuroanatomy, 400964 - Clinical Neurosciences, 400166 - Clinical Neurosciences

Special Requirements

Due to space limitations, students must be enrolled in the following courses: 3577 Bachelor of Medical Science, 3673 Bachelor of Medical Science, 3682 Bachelor of Medical Science (Advanced), 3657 Bachelor of Medical Science/ Bachelor of Information and Communication Technology, 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4662 Bachelor of Health Science/Master of Physiotherapy, 4663 Bachelor of Health Science/Master of Occupational Therapy, 4666 Bachelor of Health Science (Honours)/Master of Podiatric Medicine, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy, 4711 Bachelor of Occupational Therapy, 4712 Bachelor of Occupational Therapy (Honours). NOTE: Enrolment of students in other programs may be approved by the Unit Coordinator for the Summer session, subject to vacancies and meeting equivalent prerequisite knowledge. Please lodge a Rule Waiver request for enrolment.

....

This unit builds on the human anatomy and physiology studied in first and second year, equipping students with detailed knowledge of functional neuroanatomy, with particular emphasis on the central nervous system. Cadaver specimens are used to facilitate the learning of spatial relationships between structures. The study of neurological function and dysfution integrates many previously learned scientific principles.

300754.3 Neuroanatomy

Credit Points 10 **Level** 3

Assumed Knowledge

The outcomes of: 300543 Cell Biology, 300554 Principles of Chemistry, 300752 Introduction to Anatomy and Histology, 300753 Introduction to Human Physiology; or 400868 Human Anatomy & Physiology 1, 400869 Human Anatomy & Physiology 2; or equivalent units.

Prerequisite

400868.2 Human Anatomy and Physiology 1 OR **300818.1** Introduction to Physiology

Equivalent Units

300322 - Neuroanatomy, 400964 - Clinical Neurosciences, 400166 - Clinical Neurosciences

Special Requirements

Successful completion of 80 credit points. Due to space limitations, students must be enrolled in the following courses: 3577 Bachelor of Medical Science, 3673 Bachelor of Medical Science, 3682 Bachelor of Medical Science (Advanced), 3657 Bachelor of Medical Science/Bachelor of Information and Communication Technology, 4661 Bachelor of Health Science/Master of Podiatric Medicine, 4662 Bachelor of Health Science/Master of Physiotherapy, 4663 Bachelor of Health Science/Master of Occupational Therapy, 4666 Bachelor of Health Science (Honours)/ Master of Podiatric Medicine, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy, 4711 Bachelor

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 416

of Occupational Therapy, 4712 Bachelor of Occupational Therapy (Honours). NOTE: Enrolment of students in other programs may be approved by the Unit Coordinator for the Summer session, subject to vacancies and meeting equivalent prerequisite knowledge. Please lodge a Rule Waiver request for enrolment.

....

This unit builds on the human anatomy and physiology studied in first and second year, equipping students with detailed knowledge of functional neuroanatomy, with particular emphasis on the central nervous system. Cadaver specimens are used to facilitate the learning of spatial relationships between structures. The study of neurological function and dysfuntion integrates many previously learned scientific principles.

400986.1   Neurological Physiotherapy

Credit Points 10 **Level** 3

Prerequisite

400982.1 Core Competencies in Physiotherapy Practice AND **300754.1** Neuroanatomy AND **400981.1** Clinical Pharmacology AND **400864.2** Research Methods (Quantitative and Qualitative) AND **400866.2** Culture, Diversity and Health

Corequisite

400983.1 Orthopaedic Physiotherapy AND **400984.1** Cardiorespiratory Physiotherapy AND **400985.1** Clinical Education A

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy or 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff. Students cannot enrol in Year 3 Physiotherapy units until they have completed 160 credit points in the Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs.

....

This unit builds on the knowledge and skills developed in the first 2 years of physiotherapy study. It focuses on client assessment and evidence-based management in acute neurological physiotherapy contexts. This will require strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include introductory skills in neurological physiotherapy assessment, interpretation and prioritisation of findings along with the implementation and evaluation of appropriate treatment strategies.

400998.2   Neurological Rehabilitation

Credit Points 10 **Level** 3

Assumed Knowledge

Human anatomy, human physiology, neuroanatomy, and pathophysiology

Prerequisite

400985.1 Clinical Education A

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy and 4667 Master of Physiotherapy. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other students and relevant academic staff.

....

This unit focuses on client assessment and evidence-based physiotherapy management in neurological rehabilitation. This will require strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include clinical reasoning in neurological physiotherapy assessment and treatment, implementation and evaluation of evidence-based interventions and management of complex conditions.

300488.4   Numerical Methods in Engineering

Credit Points 10 **Level** 3

Prerequisite

200238.2 Mathematics for Engineers 2 AND **300040.2** Mechanics of Materials

....

The finite element method is a powerful numerical tool for analysing a wide range of engineering problems. The objective of this unit is to introduce the basic and fundamental principles of the finite element techniques by primarily focusing on their applications in the area of structural, solid and soil mechanics.

400204.2   Nursing Honours Thesis (Part-time)

Credit Points 60 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate leve or equivalent is required.

....

This unit aims to provide an opportunity for students to plan and implement a research project related to nursing which results in the production of a thesis. In consultation with an academic supervisor, the student will select a topic, conduct a literature review, design a research study, and report the findings and their implications. Attendance and participation at research seminars/colloquia is expected.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 417

400202.2 Nursing Honours Thesis A (Full-time)

Credit Points 20 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate leve or equivalent is required.

....

This unit aims to provide an opportunity for students to plan and implement a research project related to nursing which results in the production of a thesis. In consultation with an academic supervisor, the student will select a topic, conduct a literature review, design a research study, and report the findings and their implications. Attendance and participation at research seminars/colloquia is expected.

400203.2 Nursing Honours Thesis B (Full-time)

Credit Points 40 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate leve or equivalent is required.

....

This unit aims to provide an opportunity for students to plan and implement a research project related to nursing which results in the production of a thesis. In consultation with an academic supervisor, the student will select a topic, conduct a literature review, design a research study, and report the findings and their implications. Attendance and participation at research seminars/colloquia is expected.

300933.1 Nutrition and Health 1

Credit Points 10 **Level** 2

Assumed Knowledge

Sound understanding of undergraduate Level 1 chemistry and biology.

Equivalent Units

300649 - Nutrition and Health 1

....

Nutrition is the science that applies knowledge of the nutritional components of foods to ensure the wellbeing of the human body. This unit presents the basic principles and concepts of human nutrition including nutrient requirements, functions, deficiency symptoms and the effects of dietary excess as well as energy balance and weight control. Students will gain a general understanding of the macronutrients such as carbohydrates, proteins and lipids in human metabolism, energy release and common diseases and disorders such as obesity, malnutrition, diabetes etc. The role of water and electrolytes in cellular and tissue functions, as well as alcohol metabolism and its impact on human health will be covered. The micronutrients are also studied, including the properties, general requirements, functions and the effects of deficiency and excess consumption of vitamins and essential minerals.

300934.1 Nutrition and Health 2

Credit Points 10 **Level** 2

Prerequisite

300933.1 Nutrition and Health 1

Equivalent Units

300650 - Nutrition and Health 2

....

This unit explores the basic concepts of human nutrition in relation to various stages of the lifespan (inclusive of infants to late adulthood). It also explores several nutrition related issues such as obesity, cardiovascular disease and eating disorders. This unit provides information regarding the development of Australian dietary practices and introduces students to Australian dietary guidelines and nutrient reference values. This unit provides students with relevant and up to date information so that they may make informed decisions with regard to nutritionally critical moments of the life span in addition to emerging nutrition opinion or fact.

300144.4 Object Oriented Analysis

Credit Points 10 **Level** 2

Assumed Knowledge

General understanding of what an information system is and how information systems development is undertaken and; Introductory knowledge about system analysis and design, including - basic problem solving experience in computerised information systems - ability to derive systems requirements from problem definitions - ability to produce system models using process, data, object and network modelling. - understanding design and implementation issues include, (but may not be limited to), elementary database design, input, output and user interface design and prototyping.

....

Analyzing and modeling requirements using the object-oriented (OO) approach is the core strength of this unit. The system analysis is taken to greater depths within the context of Object Orientation. The Unified Modeling Language version 2.0 (notably use cases, activity diagrams, class diagrams and sequence diagrams) is used as a modeling standard for creating OO models in the problem space. This unit also covers methodologies for OO analysis work through practical case studies.

300888.1 Object Oriented Analysis (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

General understanding of what an information system is and how information systems development is undertaken and Introductory knowledge about system analysis and design, including - basic problem solving experience in computerised information systems - ability to derive systems requirements from problem definitions - ability to produce system models using process, data, object and network modelling. - understanding design and implementation issues including, (but may not be limited

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 418

to), elementary database design, input, output and user interface design and prototyping.

Incompatible Units

300144 - Object Oriented Analysis

Special Requirements

Students must be enrolled in 3684 Bachelor of Information and Communications Technology (Advanced)

....

Analyzing and modeling requirements using the object-oriented (OO) approach is the core strength of this unit. The system analysis is taken to greater depths within the context of Object Orientation. The Unified Modeling Language version 2.0 (notably use cases, activity diagrams, class diagrams and sequence diagrams) is used as a modeling standard for creating OO models in the problem space. The unit covers in-depth methodologies and advanced solutions in problem, solution and background modeling spaces. It also includes well-documented and detailed class diagrams through practical case studies.

700039.2   Object Oriented Analysis (WSTC)

Credit Points 10 **Level** 2

Assumed Knowledge

General understanding of what an information system is and how information systems development is undertaken and Introductory knowledge about system analysis and design, including - basic problem solving experience in computerised information systems - ability to derive systems requirements from problem definitions - ability to produce system models using process, data, object and network modelling. - understanding design and implementation issues include, (but may not be limited to), elementary database design, input, output and user interface design and prototyping.

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7067 Diploma in Information and Communications Technology Extended or 7083 Bachelor of Information and Communications Technology Extended (WSTC FYP) must pass 700199 Academic Communication 2 (WSTC Prep) or 700208 English for Tertiary Study 2 (WSTC Prep) or 700210 Introduction to Academic Communication 2 (WSTC Prep) and must pass 700201 Computer Studies (WSTC Prep) and must pass 700047 Programming Design (WSTC Prep) before enrolling in this unit. Students enrolled in 7005 Diploma in Information and Communications Technology or 7041 Bachelor of Information and Communications Technology (WSTC FYP) must pass 700047 Programming Design (WSTC Prep) before enrolling in this unit.

....

Analysing and modeling requirements using the object-oriented (OO) approach is the core strength of this unit. The system analysis is taken to greater depths within the context of Object Orientation. The Unified Modeling Language version 2.0 (notably use cases, activity

diagrams, class diagrams and sequence diagrams) is used as a modeling standard for creating OO models in the problem space. This unit also covers methodologies for OO analysis work through practical case studies.

300147.4   Object Oriented Programming

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals

....

This unit presents the concepts and principles of programming languages with the emphasis on object oriented paradigm. It addresses the importance of the separation of behaviour and implementation as well as effective use of encapsulation, inheritance and polymorphism. The students will gain intensive training in programming skills with supervised laboratory sessions and task oriented assignments.

401072.1   Obstetrics and Paediatrics

Credit Points 10 **Level** 3

Prerequisite

401073.1 Paramedic Practice 3

Special Requirements

Students must be enrolled in 4669 Bachelor of Health Science (Paramedicine).

....

The aim of this unit is to prepare the student for out-of-hospital care and management of obstetric, neo-natal and paediatric emergencies. It focuses on understanding human birth and development, normal and complicated delivery and the changes that occur in the pregnant woman. Developmental changes throughout childhood and the skills required to manage a broad range of clinical paediatric emergencies are explored.

400176.3   Occupation and Ageing

Credit Points 10 **Level** 3

Prerequisite

400912.1 Occupational Therapy Process

Special Requirements

Students must be enrolled in courses 4663 Bachelor of Health Science/Masters of Occupational Therapy and 4664 Master of Occupational Therapy or 4711 Bachelor of Occupational Therapy or 4712 Bachelor of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) possess a current WorkCover Authority approved First Aid Certificate.

....

The process of ageing will be examined critically using the biopsychosocial model. Students will use research

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 419

evidence to prepare occupational therapy intervention for older people and their families that promotes quality of life and maximum social participation. Students will reflect on their own attitudes towards ageing and how social stereotypes of older people must be challenged to promote a positive view of this stage of life.

400169.3   Occupation and Mental Health

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in 4663 Bachelor of Health Science/Masters of Occupational Therapy or 4664 Master of Occupational Therapy or 4711 Bachelor of Occupational Therapy or 4712 Bachelor of Occupatioanl Therapy (Honours). Prerequisite requirements for students enrolled in 4663 and 4711: 300754 - Neuroanatomy, 101614 - Psychology and Health and 400908 - People, Environment and Occupations. Corequisite requirement for students enrolled in 4664: 400911 - Occupational Therapy Theory and Practice.

....

This unit provides an understanding of the impact of major mental illnesses and disorders on occupational participation. These illnesses/disorders are examined from varying perspectives including consumer, recovery, population health and biomedical. Mental health legislation, policies, strategies and standards are examined in relation to clinical practice in this field. Occupational therapy theory, assessments, interventions and outcomes are incorporated together with cross-disciplinary approaches and current evidence in order to provide a foundation for practice in mental health settings.

400171.3   Occupation and Neurology

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in 4663 Bachelor of Health Science/Masters of Occupational Therapy or 4664 Master of Occupational Therapy or 4711 Bachelor of Occuaptional Therapy or 4712 Bachelor of Occupational Therapy (Honours). Prerequisite requirements for students enrolled in 4663 and 4771: 300754 - Neuroanatomy and 400908 - People, Environment and Occupations. Corequisite requirement for students enrolled in 4664: 400911 - Occupational Therapy Theory and Practice.

....

This unit prepares occupational therapy students to work in a variety of settings with individuals who have a neurological condition. The impact of common neurological conditions on the person, their environment and their occupations will be examined. Students will be exposed to a variety of assessments, interventions and evaluation tools suitable for this client population.

400165.2   Occupation and the Environment

Credit Points 10 **Level** 3

Prerequisite

400908.1 People, Environment and Occupations OR **400911.1** Occupational Therapy Theory and Practice

Special Requirements

Students must be enrolled in 4663 Bachelor of Health Science/Masters of Occupational Therapy or 4664 Master of Occupational Therapy or 4711 Bachelor of Occupational Therapy. To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2) applied for a National Police Certificate 3) possess a current WorkCover Authority approved First Aid Certificate.

....

Students will demonstrate skills in the analysis and modification of the environment using principles of ergonomics and appropriate Australian standards in building design. The ICF will provide the context for assessment and modification of the environment to enable individuals with impairments to overcome activity limitations or restrictions in participation.

300919.1   Occupational Health and Safety

Credit Points 10 **Level** 3

Equivalent Units

300794 - Occupational Health and Safety

Special Requirements

Successful completion of 60 credit points at Level 1 and 20 credit points at Level 2.

....

The unit aims to provide students with an essential working understanding of occupational health and safety legislation, risk assessment and risk management currently required for graduate employment across a broad range of industries and workplaces. The unit explores current occupational health, safety and welfare issues in the workplace with specific reference to the enforcement of OHS legislation, workers' compensation, and principles of hazard identification and risk management as required by Australian legislation. The unit also equips students with the capacity to recommend OHS policies to ensure compliance with this legislation and relevant research risk assessment strategies.

401123.1   Occupational Justice

Credit Points 10 **Level** 4

Prerequisite

400165.2 Occupation and the Environment AND **400169.3** Occupation and Mental Health

Equivalent Units

400170 - Occupation and Social Participation

Incompatible Units

400916 - Occupational Justice

Special Requirements

Students must be enrolled in 4711 - Bachelor of Occupational Therapy or 4712 Bachelor of Occupational Therapy (Honours). This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 420

an occupational therapist and not relevant as an elective for non-occupational therapy students.

....

This unit critically examines practice in the community with a focus on social inclusion and occupational justice. Life perspectives of people experiencing occupational injustice are explored. Current and historical ideologies which underpin global and national legislation and policies on human rights are examined. The promotion of occupational participation through occupational therapy practice is outlined. This unit challenges popular myths and stereotypes of people with disabilities. Issues such as de-institutionalisation, duty of care, dignity of risk, choice-making, rights and negligence are critiqued against legal, ethical and personal perspectives. This unit assists students develop critical thinking and reflection skills for practice.

400907.4   Occupational Therapy Practice 1

Credit Points 10 **Level** 1

Prerequisite

400160.4 Introduction to Occupational Therapy

Corequisite

400732.2 Communication in Health

Equivalent Units

400161 - Ocuupational Therapy Clinical Practice 1

Special Requirements

Students must be enrolled in 4663 Bachelor of Health Science/Master of Occupational Therapy or 4711 Bachelor of Occupational Therapy. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students. To be able to enrol in this unit, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff.

....

This unit introduces students to the principles of professional practice. Students will be provided with learning opportunities through a variety of experiential and community engagement activities that will begin to develop their skills and competence. Professional competencies addressed include communication, documentation, reflection and professional and ethical behaviour. A professional practice placement is incorporated in this unit. Students will complete practice hours in accordance with World Federation of Occupational Therapy accreditation guidelines.

400909.3   Occupational Therapy Practice 2

Credit Points 10 **Level** 2

Assumed Knowledge

Completion of the occupational therapy core unit 400160 - Introduction to Occupational Therapy and 400907 - Occupational Therapy Practice 1 is assumed knowledge.

Prerequisite

400908.2 People, Environment and Occupations

Equivalent Units

400167 - Occupational Therapy Clinical Practice 2

Special Requirements

Students must be enrolled in 4663 Bachelor of Health Science/Masters of Occupational Therapy or 4711 Bachelor of Occupational Therapy . To be able to enrol in this unit, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. Students must have a complete uniform for fieldwork.

....

This unit provides opportunities for students to implement skills and integrate theory with practice. In class students will be provided with learning opportunities through a variety of experiential and self-directed learning exercises that will continue to develop their clinical skills and competence in professional practice. The two week block placement is conducted at the end of the teaching period in accordance with World Federation of Occupational Therapy accreditation guidelines. This placement will allow students to work with occupational therapists in one of the many settings where therapists currently practice.

400910.1   Occupational Therapy Practice 3

Credit Points 10 **Level** 3

Prerequisite

400909.1 Occupational Therapy Practice 2

Equivalent Units

400174 - Occupational Therapy Clinical Practice 3A

Special Requirements

Students must be enrolled in 4663 Bachelor of Health Science/Masters of Occupational Therapy or 4711 Bachelor of Occupational Therapy. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. If students are visiting a NSW Health facility they will need to comply

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 421

Units

with the occupational screening and immunisation policy of NSW Health.

....

This unit will enable students to consolidate academic knowledge and practice skills. On campus practicums will focus on occupational therapy skill development to equip students with the skills to provide occupational therapy interventions during off-site professional practice placements. There will be opportunities to actively participate in assessment, analysis, goal setting, intervention and evaluation under the supervision of an occupational therapist. Students will experience full time work with occupational therapists in practice settings. Students will complete practice hours in accordance with World Federation of Occupational Therapy accreditation guidelines.

401161.1   Occupational Therapy Practice 4 (Honours)

Credit Points 20 **Level** 5

Prerequisite

400910.1 Occupational Therapy Practice 3 AND **400945.1** Honours Research 1

Incompatible Units

400949 - Occupational Therapy Practice 4 (Honours)

Special Requirements

Students must be enrolled in 4712 Bachelor of Occupational Therapy (Honours). This unit is only relevant to occupational therapy honours students as part of their embedded program of study. This unit will be specifically tailored to accommodate the course and progression requirements of these students, in particular the need to attend fieldwork placements, and therefore would not be relevant as a general elective.

....

This unit will allow students to consolidate academic knowledge and practice skills in preparation for becoming a competent beginning practitioner. Students will be expected to actively participate in assessment, analysis, goal setting, intervention and evaluation under the supervision of an occupational therapist. Students will complete practice hours in accordance with World Federation of Occupational Therapy accreditation guidelines. Career development workshops will be conducted to prepare students for entry into the profession of occupational therapy. In addition, honours students will examine their role as beginning practitioner researchers during their placement and the role of research in underpinning clinical decisions.

401126.1   Occupational Therapy Practice 4A

Credit Points 20 **Level** 4

Assumed Knowledge

Completion of all core units is assumed knowledge.

Prerequisite

400910.1 Occupational Therapy Practice 3 AND **400917.1** Occupational Therapy Specialties

Incompatible Units

400915 - Occupational Therapy Practice 4 Workshop

Special Requirements

Students must be enrolled in 4711 Bachelor of Occupational Therapy. This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students. To be able to enrol in this unit, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. Students required to have Occupational Therapy student clinical placement uniform.

....

This unit is the first of two final clinical placement units in the 4th year of the program. This unit aims to facilitate the transition from student to occupational therapy practitioner by allowing students to consolidate academic knowledge and practice skills in preparation for becoming a competent beginning practitioner. Students will be expected to actively participate in assessment, analysis, goal setting, intervention and evaluation under the supervision of an occupational therapist. Students will complete practice hours in accordance with World Federation of Occupational Therapy accreditation guidelines.

401127.1   Occupational Therapy Practice 4B

Credit Points 20 **Level** 4

Assumed Knowledge

Completion of all core units is assumed knowledge

Prerequisite

400910.1 Occupational Therapy Practice 3

Corequisite

401126.1 Occupational Therapy Practice 4A

Incompatible Units

400914 - Occupational Therapy Clinical Practice 4

Special Requirements

This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students. Students must be enrolled 4711 Bachelor of Occupational Therapy. To be able to enrol in this unit, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including cardiopulmonary resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 422

clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. Students must have Occupational Therapy student clinical placement uniform.

....

This unit is the second of two final clinical placement units in the 4th year of the program. This unit aims to facilitate the transition from student to occupational therapy practitioner by allowing students to consolidate academic knowledge and practice skills in preparation for becoming a competent beginning practitioner. Students will be expected to actively participate in assessment, analysis, goal setting, intervention and evaluation under the supervision of an occupational therapist. Students will complete practice hours in accordance with World Federation of Occupational Therapy accreditation guidelines. This unit also emphasises career planning and preparation for entering the professional world as an occupational therapist.

401122.1   Occupational Therapy Project

Credit Points 10 **Level** 4

Assumed Knowledge

Knowledge of issues and concerns relevant to the occupational therapy profession and occupational therapy clients and consumers. This knowledge will ideally have been gained in part by undertaking several fieldwork experiences in preceding years of the course.

Prerequisite

400865.2 Evidence-Based Practice

Incompatible Units

400913 - Occupational Therapy Project

Special Requirements

Students must be enrolled in course 4711 Bachelor of Occupational Therapy. This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students.

....

The aim of this unit is for students to critically apply their knowledge of professional theory, practice, research and evaluation skills to the investigation of an occupational therapy professional issue of interest or concern. Students will apply unobtrusive research methods to investigate their chosen topic. Students develop an extensive knowledge of their chosen topic and critically analyse the implications of their findings in terms of theory, policy and contemporary health care practice. Students will synthesise their findings into a scholarly research project report and present their findings at a professional-level capstone student conference.

401124.1   Occupational Therapy Specialties

Credit Points 10 **Level** 4

Prerequisite

400162.3 Child and Adolescent Occupations AND **400169.3** Occupation and Mental Health AND **400176.3** Occupation and Ageing

Incompatible Units

400917 - Occupational Therapy Specialities

Special Requirements

This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students. Students must be enrolled in course 4711 Bachelor of Occupational Therapy.

....

This unit provides occupational therapy students with the opportunity to select from, and undertake advanced study in, a range of occupational therapy clinical specialty areas. Several streams will run concurrently in this unit representing key clinical areas of specialisation in occupational therapy. Students will be able to focus their study, by selecting a combination of clinical specialty streams. Streams will cover relevant clinical content, examining the unique occupational therapy contribution in each specialty area.

300149.3   Operating Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Basic structure and functioning of computer hardware.

Prerequisite

300167.3 Systems Programming 1

....

This unit provides an introduction to the theory and practice of the internal structure, implementation and functionality of operating systems. The unit is relevant not only for systems programmers, but also for applications developers who need to understand how operating systems control computer hardware, and how they provide convenience, efficiency and security for application development and implementation.

300698.4   Operating Systems Programming

Credit Points 10 **Level** 3

Assumed Knowledge

Students are expected to have a general understanding on computer systems; computer fundamentals, and programming techniques.

Prerequisite

300581.4 Programming Techniques OR **300903.1** Programming Techniques (Advanced) OR **300147.4** Object Oriented Programming

Equivalent Units

300149 - Operating Systems

Incompatible Units

300943 - Operating Systems Programming (Advanced)

....

This unit provides the knowledge of the internal structure and functionality of Operating Systems. An operating system defines an abstraction of hardware behavior and

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 423

provides a range of services more suitable for ICT application development than what raw hardware could deliver, in terms of convenience, efficiency and security. It is important that ICT Professionals have some understanding of how these services are realized. For ICT Professionals whose role includes supporting the operating system this unit provides the introduction to the relevant theory and practice.

300943.1 Operating Systems Programming (Advanced)

Credit Points 10 **Level** 3

Prerequisite

300903.1 Programming Techniques (Advanced) OR **300581.2** Programming Techniques

Incompatible Units

300689 - Operating Systems Programming, 300149 - Operating Systems

Special Requirements

Students must be enrolled in 3684 Bachelor of Information and Communications Technology (Advanced)

....

This unit provides the knowledge of the internal structure and functionality of Operating Systems. Through the use of case studies the abstraction that Operating Systems provide will be investigated, and techniques for programming with these abstractions will be developed.

300876.1 Organic Chemistry

Credit Points 10 **Level** 2

Prerequisite

300803.1 Essential Chemistry 2

Equivalent Units

300553 - Molecules of Life: Synthesis and Reactivity, 300301 - Organic Chemistry

Special Requirements

Splash proof safety glasses and laboratory coat, laboratory notebook and closed shoes are required.

....

Organic molecules are at the heart of the chemistry of life and industry. This unit builds on the fundamental chemical principles, exploring reaction mechanisms and the concept of reactivity and stereo- and regio-selectivity of many of the central reactions that form the basis of living processes, modern research, and contemporary industrial transformations. The unit contains a problem-based module on the application of spectroscopic methods to organic structure elucidation, focusing on spectroscopic data and a practical section on organic synthesis. The unit will focus on complex organic molecules including biologically relevant molecules, and examples from chemical industries, medicinal and pharmaceutical industries.

200585.4 Organisational Behaviour

Credit Points 10 **Level** 1

Equivalent Units

MG204A - Organisational Behaviour, 700031 - Organisational Behaviour (UWSC)

....

Organisational Behaviour examines individual, group and organisational behaviours and the influence these have on each other. This unit is based on developing skills that can help you navigate through these processes and behaviours. The focus is on participation, to guide students to both reflect on and develop their own skills to become better managers, as well as employees.

200157.3 Organisational Learning and Development

Credit Points 10 **Level** 3

Prerequisite

200571.2 Management Dynamics OR **61611.1** Management Studies OR **H1727.1** Business Management

....

This unit adopts a conceptual and experiential approach to understanding organisational learning and development in a rapidly changing world. Adopting a systems perspective, it explores planned interventions and improvements in organisational structures and processes to promote effective learning and development at individual, group and organisational levels. Students will be encouraged to critically evaluate a range of theories of organisational learning and sense-making, which they will to apply to real-life situations.

400983.1 Orthopaedic Physiotherapy

Credit Points 10 **Level** 3

Prerequisite

400982.1 Core Competencies in Physiotherapy Practice AND **400981.1** Clinical Pharmacology AND **400871.1** Professional Health Competencies AND **101614.1** Psychology and Health AND **400864.2** Research Methods (Quantitative and Qualitative)

Corequisite

400984.1 Cardiorespiratory Physiotherapy AND **400986.1** Neurological Physiotherapy AND **400985.1** Clinical Education A

Special Requirements

Students must be enrolled in 4662 Bachelor of Health Science/Master of Physiotherapy, 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy or 4667 Graduate Entry Master of Physiotherapy, 4706 Bachelor of Physiotherapy and 4707 Bachelor of Physiotherapy (Honours) programs. Students in this program are required to participate fully in practical classes. This involves disrobing to shorts and singlet or swim-suit equivalent in mixed gender classes. Students will practice hands-on physiotherapy examination and treatment techniques on both genders, and will personally experience these techniques which will be performed on them by other

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 424

students and relevant academic staff. Students cannot enrol in Year 3 Physiotherapy units until they have completed 160 credit points in the Bachelor of Health Science/Master of Physiotherapy and 4668 Bachelor of Health Science (Honours)/Master of Physiotherapy programs.

....

This unit builds on the knowledge and skills developed in the first 2 years of physiotherapy study. It focuses on client assessment and evidence-based management in acute orthopaedic physiotherapy contexts. This will require strong communication skills, ethical and professional behaviour and an appreciation of interprofessional care. Professional competencies addressed in this unit include skills in orthopaedic physiotherapy assessment, interpretation and prioritisation of findings along with the implementation and evaluation of appropriate treatment strategies.

400808.4   Outdoor Recreation

Credit Points 10 **Level** 1

Equivalent Units

100666 - Outdoor Recreation 1, 700063 - Outdoor Recreation (UWSC), 102206 - Experience based Outdoor Education

Special Requirements

Students must be enrolled in 4659 Bachelor of Health Science (PDHPE), 4549 Bachelor of Health Science (PDHPE), 4747 Bachelor of Health Science (HPE) or 4742 Bachelor of Health Science (HPE) - Pathway to Teaching (Secondary).

....

Students will learn about the variety of outdoor recreation and educational pursuits available to individuals, in school or community settings. Through active participation and guided instruction, students will also learn how to supervise specific forms of outdoor recreation and education in activities such as hiking, canoeing and camping. Learning content will reinforce the rationale for the development, administration and delivery of school-based and community outdoor recreation and education programs within Australia.

401074.1   Out-of-hospital Medical Care 1

Credit Points 10 **Level** 2

Prerequisite

400138.3 Pathophysiology 1

Corequisite

401073.1 Paramedic Practice 3

Special Requirements

Students must be enrolled in 4669 Bachelor of Health Science (Paramedicine).

....

The aim of this unit is to extend knowledge and clinical skills required for the assessment and management of cardiovascular, respiratory and neurological medical emergencies. The unit combines pathophysiological principles development of skills and interpretation of

diagnostic technology with clinical decision-making to implement advanced life support.

401096.1   Out-of-hospital Medical Care 2

Credit Points 10 **Level** 3

Prerequisite

400868.1 Human Anatomy and Physiology 1 AND **400869.1** Human Anatomy and Physiology 2

Special Requirements

Students must be enrolled in 4669 Bachelor of Health Science (Paramedicine)

....

The aim of this unit is to extend knowledge and clinical skills required for the management of gastrointestinal, renal, genitourinary, gynaecological and endocrine medical emergencies. The unit combines pathophysiological principles with development of skills in the use and interpretation of diagnostic technology with clinical decision-making to implement advanced life support.

401106.1   Paediatric Physiotherapy

Credit Points 10 **Level** 4

Prerequisite

400997.3 Exercise Rehabilitation AND **400998.2** Neurological Rehabilitation

Incompatible Units

401047 - Paediatric Physiotherapy

Special Requirements

Students must be enrolled in 4706 Bachelor of Physiotherapy or 4707 Bachelor of Physiotherapy (Honours)

....

This unit aims to prepare the student as a competent entry-level practitioner in paediatric physiotherapy. It focuses on understanding the changes which occur from infancy to maturity and the impact of congenital or acquired conditions, or lifestyle diseases causing dysfunction. Clinical and ethical reasoning and family-centred practice are both stressed. The approach will also emphasise the role of physiotherapy within inter-professional teams to prepare for different work settings (acute care, rehabilitation and/or community). The unit integrates prior learning from previous years (especially units related to neurology musculoskeletal and cardiopulmonary physiotherapy and exercise rehabilitation)

300957.1   Parallel and Distributed Computing

Credit Points 10 **Level** 3

Prerequisite

300565.2 Computer Networking

Equivalent Units

300112 - Digital Communication Technology

....

Modern computer systems rely increasingly on distributed computing mechanisms, implemented often as clusters, web services, grids and Clouds. Distributed computing

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 425

systems can provide seamless access to a variety of networked resources, e.g. processing cores, large data stores and information repositories, expensive instruments, and multimedia services for a wide range of applications. This unit provides foundation knowledge and understanding of the basic mechanisms required to implement distributed computing systems, especially Clusters, Grids and Clouds. This includes basic concepts such as virtualization and abstraction, integration, services and SOA, operating systems of distributed systems, the development of distributed applications, network operating systems and middleware. Students will build knowledge of distributed systems and applications and learn about the development trends of distributed systems. Students will learn about virtualization and the role it plays in current computing. They will also investigate how these techniques and algorithms can be used in the design and implementation of distributed systems.

401068.1 Paramedic Practice 2

Credit Points 10 **Level** 2

Prerequisite

401067.1 Paramedic Practice 1

Special Requirements

Students must be enrolled in 4669 - Bachelor of Health Science (Paramedicine) Prior to enrolling in this unit, students must: 1) Have signed the Student Undertaking Form 2) Have received their National Police Certificate and presented this to Student Central Office to have it recorded on their student record 2) Have completed a Working with Children Check 3) Have completed a senior first aid certificate (must have any of the following unit codes: HLTFA301B, HLTFA1A, HLTFA401B, HLTFA203A or HLTFA311A) 4) Comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. 5) Buy the Western Sydney University paramedic uniform, which complies with the NSW Health uniform requirements. Students are expected to have a complete Western Sydney University student paramedic uniform including: Helmet Boots Belt Hi-visibility wet-weather gear (jacket and pants) Cargo pants Long-sleeved shirt Jumper Hi-visibility vest Cap Safety glasses Students are expected to have their own stethoscope. All uniform and equipment must be taken to every shift. Students who attend a shift without the necessary equipment will be refused attendance by the Ambulance Service of New South Wales.

....

This unit focuses on the core competencies for paramedic practice in real world situations. These competencies will be developed through clinical placements with an emergency ambulance crew over a period of 3 weeks and through an evidence-based exploration of paramedic practice. The core competencies include communication, documentation, reflections and professional ethical behaviour. Students will practice patient assessment and supervised procedures appropriate to their level. Students will engage in reflective debriefs after completing the clinical placement, expand their knowledge of electrocardiography, and explore methods of drug therapy administration in the paramedical context.

401073.1 Paramedic Practice 3

Credit Points 10 **Level** 2

Prerequisite

401068.1 Paramedic Practice 2

Corequisite

401074.1 Out-of-hospital Medical Care 1

Special Requirements

1. Students must be enrolled in 4669 Bachelor of Health Science (Paramedicine). 2. Students must be compliant with NSW Health vaccination policy, have completed a National Police Check and be current regarding health, medical and physical fitness sufficient to undertake placement in accordance with the UWS Fitness For Placement process. 3. Students must have the UWS student paramedic uniform (pants, long sleeve shirt, polo, safety glasses, safety helmet, non-steel cap black boots, stethoscope, reflective vest and rain jacket)

....

This unit continues the development of paramedic professional and clinical skills and techniques in preparation for the second work placement with a paramedic team. Students will further develop patient assessment and examination skills in a systems-based approach. Advanced paramedicine skills will be taught including invasive procedures such as intravenous access, needle thoracocentesis, advanced airway management, intraosseous access and advanced life support. The clinical decision making, patient assessment, and communication skills developed in previous units will be drawn together with this content and integrated into simulated case scenarios, preparing students for their second emergency ambulance clinical placement in the following semester. Students will complete up to 5 days of clinical placement in non-state based ambulance service healthcare settings.

401069.1 Paramedic Practice 4

Credit Points 10 **Level** 3

Prerequisite

401073.1 Paramedic Practice 3

Special Requirements

Students must be enrolled in the Bachelor of Health Science (Paramedicine) Prior to enrolling in this unit, students must: 1) Have signed the Student Undertaking Form 2) Have received their National Police Certificate and presented this to Student Central Office to have it recorded on their student record 2) Have completed a 'national criminal history check and review of findings of workplace misconduct' 3) Have completed a senior first aid certificate (must have any of the following unit codes: HLTFA301B, HLTFA1A, HLTFA401B, HLTFA203A or HLTFA311A) 4) Comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy. 5) Buy the Western Sydney University paramedic uniform, which complies with the NSW Health uniform requirements. Students are expected to have a complete Western Sydeny University student paramedic uniform including: - Helmet - Boots - Belt - Hi-visibility wet-weather gear (jacket and pants) - Cargo pants - Long-sleeved shirt - Jumper - Hi-visibility vest - Cap - Safety glasses Students are expected

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 426

to have their own stethoscope. All uniform and equipment must be taken to every shift. Students who attend a shift without the necessary equipment will be refused attendance by the Ambulance Service of New South Wales.

....

This unit focuses on the core competencies for paramedic practice in real world situations. Students will review high fidelity simulation scenarios to facilitate simulation debrief sessions exploring scene management, interpersonal communication, decision making, inter-professional cooperation and clinical management, Students will then consolidate and extend these skills through supervised clinical placements with an emergency ambulance crew over a period of 5 weeks. Experiences and exposure gained during the placement will form the basis for analysis of case studies and reflective learning.

300889.1   Pathological Basis of Disease

Credit Points 10 **Level** 2

Assumed Knowledge

Knowledge of cell structure and function of cellular components (consistent with the unit Cell Biology); Knowledge of biochemical pathways and energy production (consistent with the unit Functional Proteins and Genes).

Prerequisite

300818.1 Introduction to Physiology

Equivalent Units

300323 - Pathological Basis of Disease

Incompatible Units

400138 - Pathophysiology 1

Special Requirements

Students must be enrolled in 3577 Bachelor of Medical Science, 3657 Bachelor of Medical Science/Bachelor of Information and Communications Technology, 3673 Bachelor of Medical Science, 3682 Bachelor of Medical Science (Advanced), or 3674 Bachelor of Medical Science (Nanotechnology). Note: Enrolment of students in other programs may be approved by the Unit Coordinator for the Summer session, subject to vacancies and meeting equivalent prerequisite knowledge. Please lodge a Rule Waiver request for enrolment.

....

Pathology is the study of disease. Students will gain an understanding of human pathogenesis, general and systems pathological processes, and the scientific basis of diagnostic and treatment options. The unit also introduces normal human tissue and organ histology, and examines histopathological changes evident in disease states.

401181.1   Pathomechanics and Podiatric Medicine

Credit Points 10 **Level** 2

Assumed Knowledge

Completion of all core units to this semester/ year of study is assumed knowledge Anatomy is particularly important for the successful completion of this unit. An understanding of the structure and function of the lower extremity is needed as the focus of this unit is on pathologies of the foot and

lower extremity and subsequent assessment, diagnosis and management.

Prerequisite

400881.3 Functional Anatomy AND **400905.2** Introduction to Podiatry

Corequisite

401140.1 Biomechanics

Incompatible Units

400935 - Podiatric Techniques 1A

Special Requirements

The unit is Podiatry specific and restricted only to students enrolled in courses 4708 Bachelor of Podiatric Medicine and 4709 Bachelor of Podiatric Medicine (Honours).

....

This unit will introduce students to clinical/practical and theoretical foundations of human biomechanics of the foot and lower extremity, and the assessment, diagnosis and treatment of common foot and lower extremity pathologies. The unit consists of co-ordinated lectures and practical components to cover the theory and application of foot and lower extremity biomechanics and gait analysis, relevant physical examinations (bones, joints, soft tissues), diagnosing common foot and lower extremity conditions and related treatment options.

400138.3   Pathophysiology 1

Credit Points 10 **Level** 2

Prerequisite

400868.2 Human Anatomy and Physiology 1 AND **400869.2** Human Anatomy and Physiology 2

Incompatible Units

300323 - Pathological Basis of Disease

....

This unit is intended for students enrolled in a range of health science courses within the School of Science and Health. It is designed to equip students with a detailed knowledge of pathophysiological processes evident in a number of key human diseases that are vocationally relevant to these students. The content is organised using a systems based approach. Problem-based learning methods will be adopted in the tutorial component of this unit to help students develop crucial problem solving skills.

400267.3   Pathophysiology 2

Credit Points 10 **Level** 2

Prerequisite

300323.3 Pathological Basis of Disease OR **400138.3** Pathophysiology 1

....

This unit extends the scope of topics explored in Pathophysiology 1 and is designed to equip students enrolled in health science courses of the School with detailed knowledge of pathophysiological processes evident in a number of key human diseases that are vocationally relevant to these students. Problem-based learning methods will be adopted in the tutorial component

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 427

of this unit to help students develop crucial problem solving skills.

300984.1   Pavement Materials and Design

Credit Points 10 **Level** 2

Prerequisite

300965.1 Engineering Materials

Equivalent Units

300482 - Engineering Geology and Concrete Materials

....

This unit will provide students the basic knowledge and concepts on pavement materials and design. It will cover the common materials used in pavement construction such as aggregates, cement, asphalt, and concrete. It will also cover the pavement design system, pavement construction, design of flexible pavements, design of rigid pavements, and pavement maintenance.

700239.1   Pavement Materials and Design (WSTC AssocD)

Credit Points 10 **Level** 2

Prerequisite

700147.2 Engineering Materials (WSTC AssocD)

Equivalent Units

300984 - Pavement Materials and Design

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit will provide students with the basic knowledge and concepts on pavement materials and design. It will cover the common materials used in pavement construction such as aggregates, cement, asphalt and concrete. It will also cover the pavement design system, pavement construction, design of flexible pavements, design of rigid pavements and pavement maintenance.

300150.3   PC Workshop

Credit Points 10 **Level** 1

Assumed Knowledge

Basic knowledge of personal computers.

....

This unit introduces students to the hardware and software components of a stand-alone personal computer (PC). Students become familiar with the CPU, memory, secondary storage, IO peripherals and communications devices commonly found in a PC. They learn to assemble and disassemble a PC and to install hardware and software components according to supplier specifications. Students also learn to use and customise the PC operating system to maintain and optimise PC performance.

400798.3   PDHPE: Games for Diverse Groups

Credit Points 10 **Level** 2

Special Requirements

Students must be enrolled in 4659 - B.HSc (PDHPE). Students must have completed a Child Protection Course, Working with Children Check and First Aid Certificate.

....

This unit focuses on teaching and coaching young children in a range of Indigenous, striking/fielding, and target sports. The aim is to build on students' knowledge and application of various teaching /coaching styles with a focus on the game sense approach. In particular, the unit addresses issues of diversity and inclusion in school, sport, and recreation activities. As part of the unit, students will implement a teaching program in a local primary school and complete introductory coaching certificates in a variety of sports.

400908.2   People, Environment and Occupations

Credit Points 10 **Level** 2

Prerequisite

400160.3 Introduction to Occupational Therapy AND **400907.3** Occupational Therapy Practice 1

Equivalent Units

400734 - Functional Analysis

Special Requirements

Students must be enrolled in course 4663 - Bachelor of Health Science/Master of Occupational Therapy or 4711 Bachelor of Occupational Therapy. This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students.

....

Analysing an individuals participation in meaningful occupations is an essential clinical reasoning process to be mastered by occupational therapists. Therapists must be able to analyse three factors to do so: the persons abilities; the demands of the occupation; and the impact of the environmental context on participation. This unit will facilitate the development of these skills so that students can maximise the person-environment-occupation fit to optimise participation for people with a variety of health challenges or disabilities.

200860.1   People, Work and Society

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Equivalent Units

200616 - Workplace Behaviour, 61441 - Workplace Behaviour

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 428

'People, Work and Society' draws on psychology and sociology to deepen participants' practical human resource management (HRM) expertise. Designed for those aiming at careers as HRM professionals, participants will use HRM knowledge to develop policy and procedure that takes account of the psychology of individuals and groups as well as rising expectations for socially- responsible management. The complexities and rewards around managing diverse workforces receive particular attention. Through the challenge of real-world activities, participants are introduced to the difficult judgements that confront HRM professionals around people at work.

101680.3   Perception

Credit Points 10 **Level** 2

Equivalent Units

100022 - Biological Psychology and Perceptual Processes

....

This unit examines the fundamental principles underlying human perception and expands upon the sensation and perception content introduced in the foundational psychology units. After reviewing the biological basis of sensing and perceiving, we will explore the way this relatively raw information is processed and organised into the complex perceptions of the visual, auditory, olfactory, gustatory and somatosensory systems, which constitute the fundamental basis of our experience of the world. The unit will also examine the history of perceptual theories and the use of psychophysical methods and experimental approaches to the study of perceptual processes

102166.1   Person-Centred Practice

Credit Points 10 **Level** 7

Assumed Knowledge

Professionals with teaching or other relevant qualifications.

Special Requirements

Students must be enrolled in a Postgraduate course.

....

The shift in educational policy and legislation to one of inclusion has been accompanied by a move to models of service delivery which are person- and family-centred and which also recognise the need for tiers in intervention. Whilst the range of service delivery models currently operating across educational and community settings for varied levels of need and developmental stages will be explored and evaluated, emphasis will be given to person-centred practice. Through an analysis of the literature encompassing both evidence-based practice and practice-based evidence students will evaluate the implications of the model for individuals, families, teachers, other professionals, schools, services, their own practice and for systems practice.

400774.2   Perspectives on Nursing

Credit Points 10 **Level** 7

Equivalent Units

400234 - Nursing Knowledge: Concepts, Models and Theories

Special Requirements

Students must be enrolled in a postgraduate course.

....

This unit addresses the origins and development of nursing knowledge. A major focus is the development and progress of the discipline of nursing. It includes an in-depth exploration of the history and philosophy of nursing science, including epistemology and strategies for theory generation in nursing. The impact of borrowed perspectives on research, theory and practice in the discipline of nursing is also explored. The unit also addresses the development of theoretical perspectives in nursing, including areas of controversy in the discipline. Numerous perspectives on the relationship between nursing theory, research and practice are considered. A major emphasis in the unit is development of knowledge and understanding of the link between nursing theory, research, practice and related issues.

300920.1   Pharmacological Chemistry

Credit Points 10 **Level** 3

Assumed Knowledge

This unit is aimed at undergraduates with a grounding in chemistry and biochemistry.

Equivalent Units

300324 - Pharmacological Chemistry

....

This unit is aimed at undergraduates with grounding in chemistry and biochemistry who have an interest in a career related to medicinal chemistry. Because it concerns the manner in which foreign molecules can interact with the body's mechanisms it is of direct relevance not only to the pharmaceutical industry but also to the food, agricultural, cosmetic (etc) industries. It conveys the fascination of designing chemical structures for particular uses within biological systems and which overlap the disciplines of chemistry, biochemistry, cell biology and pharmacology. Emphasis is placed upon design of the chemical structure itself rather than an investigation of the specific chemical structure of its site of action in the body. This is reflected in the laboratory work which traces the historical development of drug design, essentially through a process of a series of inorganic syntheses, relevant to a range of common drugs.

300884.1   Pharmacology

Credit Points 10 **Level** 2

Assumed Knowledge

Introductory biochemistry and general anatomy of the major body systems such as central and peripheral nervous systems, cardiovascular, respiratory, digestive, endocrine, and urinary systems.

Prerequisite

300818.1 Introduction to Physiology

Equivalent Units

300505 - Pharmacology

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 429

Incompatible Units

400981 - Clinical Pharmacology, 400135 - Clinical Pharmacology and Microbiology

....

Pharmacology is the study of the therapeutic interactions of drugs with the human body, focusing on mechanisms of action at the biochemical and cellular level, on adverse reactions and on clinical applications. This unit provides students with a sound understanding of fundamental aspects of this field to prepare for further study of advanced pharmacology or other biomedical sciences. General principles of pharmacokinetics and pharmacodynamics, will be discussed in detail. The major drug categories that affect different organ systems will be addressed, and research methods in pharmacology and the drug development process will also be introduced.

401182.1   Pharmacology for Podiatrists

Credit Points 10 **Level** 3

Assumed Knowledge

Completion of all core units to this semester year of study is assumed knowledge

Prerequisite

400981.2 Clinical Pharmacology

Corequisite

401183.1 Podiatric Surgery AND **400929.2** Podiatric Practice 1

Incompatible Units

400938 - Podiatric Techniques 2B

Special Requirements

The unit is Podiatry specific and restricted only to students enrolled in courses 4708 Bachelor of Podiatric Medicine and 4709 Bachelor of Podiatric Medicine (Honours). The unit involves pharmacology in the context of podiatric clinical practice. Students will be building on previous clinical skills and knowledge in the podiatry program.

....

This unit will cover the pharmacological foundations and principles of drugs with a particular emphasis on those that may be prescribed by podiatrists upon appropriate qualification, including indications, contraindications, drug-drug interactions and adverse drug reactions. Student knowledge of national legislation relating to the effective and safe use of drugs will be developed, alongside an understanding of the process for obtaining prescribing rights and the attendant responsibilities. Upon successful completion of this unit and registration as a podiatrist, students will be eligible to seek further training to gain endorsement to prescribe.

102380.1   Philosophical Aesthetics

Credit Points 10 **Level** 7

....

This unit involves study of aesthetics, which may include philosophical approaches to art and artistic genres such as literature and cinema, and to beauty itself. It will include an historical overview of the field, an analysis of one particular set of problems or debates, and a close examination of a specific school or thinker. It will explore concepts of aesthetic judgement and value, as well as the relationship between aesthetics and other aspects of philosophy.

100275.4   Philosophies of Love and Death

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The Western experience of the fundamental questions of love and death will be examined. Literary as well as philosophical works will be utilised. Ancient Greek, Christian and medieval attitudes will be contrasted with more modern romantic and existentialist views. Authors will include: Sophocles, Plato, Augustine, Goethe, Austen, Sade, Dostoyevsky and Heidegger.

101843.2   Philosophy and Environment

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

In 2016 this unit replaced by102417 Philosophy and Environment. Philosophy and Environment focuses on how we understand and value our interactions with the natural environment, how humans have changed the world and themselves through those interactions and the questions and problems created through that dynamic. Contemporary issues such as climate change, resource depletion, land degradation, conflict over resources, and treatment of animals have become prominent ethical, political and philosophical concerns. This unit looks at these sort of environmental problems through philosophical methods that reveal the traditions of thought, attitude and action underlying them. Students will be introduced to the major apporaches and questions most relevant to explaining contemporary environmental problems.

102417.1   Philosophy and Environment

Credit Points 10 **Level** 3

Equivalent Units

101843 - Philosophy and Environment

Special Requirements

Successful completion of 60credit points in currently enrolled course.

....

Philosophy and Environment focuses on how we understand and value our interactions with the natural environment, how humans have changed the world and themselves through those interactions and the questions and problems created through that dynamic. Contemporary issues such as climate change, resource depletion, land degradation, conflict over resources, and treatment of animals have become prominent ethical, political and philosophical concerns. This unit looks at these sort of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 430

environmental problems through philosophical methods that reveal the traditions of thought, attitude and action underlying them. Students will be introduced to the major apporaches and questions most relevant to explaining contemporary environmental problems.

101881.2 Philosophy and the Good Life

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

What does it mean to live a "good life"? One conception of philosophy that goes back to the teachings of the ancient Greeks and Romans is that it is the discipline pre-eminently concerned with teaching people how to live a good life. This unit will investigate the idea of "the good life" through an examination of select texts in ancient and modern philosophy. It will address questions that both ancient and modern philosophers have grappled with: on the right relation between reason and emotion, on the role of pleasure in human life, on the development of character, on the "care of the self," and on pursuing a meaningful life.

101965.1 Philosophy of Religion

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines central issues in the philosophy of religion. Students will look at a variety of ideas emanating from a philosophical consideration of religious belief and practice. Issues include arguments for and against the existence of God, conceptions of religious experience and faith, the relationship between science and religion, and religion and ethics.

400892.2 Physical Activity, Nutrition and Health

Credit Points 10 **Level** 2

Equivalent Units

400780 - Nutrition, Physical Activity & Mental Health

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (Personal Development, Health and Physical Education), 4742 - Bachelor of Health Science (Health and Physical Education)-Pathway to Teaching (Secondary) or 4747 - Bachelor of Health Science (Health and Physical Education).

....

This unit examines the interdependence between physical activity, nutrition and health and the role of key lifestyle behaviours in improving health outcomes, longevity, and quality of life. Throughout this theoretical and practical unit, students explore personal and socio-cultural health issues, and identify how these health issues can be addressed in a

proactive, holistic, and sustainable manner at an individual and population level.

300849.2 Physical Chemistry

Credit Points 10 **Level** 2

Assumed Knowledge

This unit requires a knowledge of introductory concepts in differential and integral calculus.

Prerequisite

300800.2 Essential Chemistry 1 OR **300808.2** Introductory Chemistry AND **300803.1** Essential Chemistry 2

Equivalent Units

CH205A - Chemistry 2; J2776 - Physical Chemistry 2; 300236 - Physical Chemistry 2; 300540 - Bimolecular Dynamics

....

Physical Chemistry describes the fundamentals of energy changes in chemical systems (thermodynamics), the rates and mechanisms of chemical reactions (kinetics), and electrochemistry and/or ion and electron transport. These concepts will be applied to a range of chemical and/or biochemical processes. A major focus of the unit will be to develop the ability to study quantitative chemical/biochemical problems, and develop useful physical chemistry experimental and data-analysis skills.

300828.1 Physics 1

Credit Points 10 **Level** 1

Assumed Knowledge

HSC 2 Unit Mathematics Band 4 (Not General Mathematics).

Equivalent Units

300558 - Physics 1

Special Requirements

Students must have a Scientific Calculator and Laboratory Notebook (good quality A4 size book in which graphs, computer printouts and other relevant information may be added in as required) in this unit.

....

This unit provides an introduction to physics for science and medical science students as well as providing a basis for further study of more advanced physics for students pursuing courses in nanotechnology, chemical, physical and mathematical sciences. It provides a foundation to understand the physical principles which underlay scientific instrumentation and analysis Topics covered include systems of units; Introductory mechanics, Newtons laws, work, conservation of energy and momentum; Electricity, electrostatics, DC and AC circuits and components, introductory electromagnetism; Waves and optics, electromagnetic radiation, reflection, refraction, image formation, polarisation, interference and diffraction.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 431

300829.1 Physics 2

Credit Points 10 **Level** 1

Assumed Knowledge

HSC 2 Unit Physics or one semester of university level Physics or equivalent plus HSC 2 Unit Mathematics Band 4 (Not General Mathematics) or one semester of university level Mathematics or equivalent.

Equivalent Units

300559 - Physics 2

Special Requirements

Students must have a Scientific calculator and laboratory notebook (this should be a good quality A4 size book into which graphs, computer printouts and other relevant information may be added as required).

....

This unit develops a deeper understanding of physics for students pursuing courses in nanotechnology, chemical, physical and mathematical sciences. Topics covered include Mechanics: Equilibrium, stress and strain, harmonic oscillators, rotational motion, moment of inertia. Gravitation, types of force in nature. Thermal Physics: temperature, specific & latent heat, heat transfer, kinetic theory of gases, first law of thermodynamics, isothermal, isobaric & adiabatic processes. Introduction to Modern Physics: special relativity, time dilation, length contraction, momentum, mass, rest energy, velocity addition. Basic quantum theory, Planck's hypothesis, wave nature of matter, quantum mechanical view of atoms. Nuclear physics, radiation, half-life, nuclear reactions.

401107.1 Physiotherapy for Chronic Illness and Disease

Credit Points 10 **Level** 4

Prerequisite

400997.3 Exercise Rehabilitation

Corequisite

401110.1 Clinical Education B (Rehabilitation) OR
401111.1 Clinical Education C (Ambulatory Care) AND
401112.1 Clinical Education D (Paediatrics) AND
401113.1 Clinical Education E (Advanced Care)

Incompatible Units

401048 - Physiotherapy for Chronic Illness and Disease

Special Requirements

Students must be enrolled in course 4706 Bachelor of Physiotherapy or 4707 Bachelor of Physiotherapy (Honours)

....

This unit focuses on the role of physiotherapy in chronic disease management. A case-based learning approach will be undertaken to provide students with the theory, research and practice which underpins the assessment and treatment of people with chronic disease. The role of lifestyle factors in the development of chronic disease will be explored, along with health promotion and preventative strategies. The importance of client-centred care, which respects culture and diversity, and the multidisciplinary team approach, will also be investigated in the context of frequently occurring chronic conditions.

101752.1 Pigments of the Imagination

Credit Points 10 **Level** 2

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all Undergraduate students who have open electives. Pigments of the Imagination challenges the accepted view that there is such a thing as 'race' based on skin colour and that identity is based on it. This unit will encourage students to consider their own definitions of race and explore the view that it is an imaginary concept. Students will examine the various ways race as an imaginary concept permeates our education practices and cultural representations influencing the construction of racially classified positions for Indigenous Australians as well as all Australians. Students will be encouraged, by critically analysing a range of cultural texts to re-imagine Indigenous and Non-Indigenous relations.

300990.1 Pile Foundations

Credit Points 10 **Level** 4

Prerequisite

301001.1 Engineering Geomechanics OR **300485.3** Foundation Engineering

....

This unit covers analysis and design criteria for pile foundations subjected to axial, lateral and dynamic loading based on the Australian Standards. Computer software necessary to carry out analysis and design will be introduced. Also field testing methods available for pile integrity testing will be discussed.

200148.2 Planning and Design of Hospitality Facilities

Credit Points 10 **Level** 3

Assumed Knowledge

This is an advanced unit which assumes basic knowledge of hospitality management.

....

An understanding of planning and design is critical to the effective long-term sustainability and performance of hospitality businesses. Planning and Design of Hospitality Facilities provides a unique opportunity for students to learn about contemporary planning a design issues including: an examination of design processes; the role of government and building authorities; design principles for hospitality facilities; sustainability; and managerial aspects related to commissioning and evaluating hospitality facilities.

101634.2 Planning and Environmental Regulation

Credit Points 10 **Level** 7

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 432

This unit provides students with an understanding of the planning process from both a State government and Local Government perspective. The unit will cover concepts related to the planning process, focusing on development control and regulation issues, planning instruments and development applications. It will also address the areas of planning and environment law, with specific reference to the legal from work that regulates planning and development in NSW.

101593.3   Planning the City: Development, Community and Systems

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 80 credit points

....

This unit aims to provide students with a fundamental understanding of the role of government, focusing on the role and nature of planning across all levels of government from a variety of theoretical frameworks. It presents a critical examination of the urban development and planning processes, with particular attention given to the environmental and political issues associated with planning at the local government level. It looks at the changes and challenges confronting local government in view of the demands made on them by the changing social and economic conditions and societal values such as those relating to requirements for public participation, transparency and accountability. The unit also examines the role of private sector in planning and assessment processes.

300921.1   Plant Health and Biosecurity

Credit Points 10 **Level** 3

Assumed Knowledge

Foundation in chemical and biological sciences, quantitative thinking

Equivalent Units

300787 - Plant Microbiology and Protection

Incompatible Units

300336 - Plant Microbiology Interactions, 300643 - Plant Protection

....

This unit explores needs of world food production systems for improved plant health and biosecurity, from paddock to plate and environmental consequences of management practices. Through their studies, students will learn to recognise the significance of plant pests (invertebrates, microorganisms and weeds) and their impact on human society and food security, and methods of reducing their damage to plants and plant products. Major areas of study include: recognition of pests and diseases and assessment of field damage; strategies for reducing pest damage (including legislative, physical, biological, genetic and chemical control methods) and their benefits and limitations; the theory and practice of integrated pest and disease management systems; and issues associated with quarantine and biosecurity.

300865.1   Plant Physiology

Credit Points 10 **Level** 2

Assumed Knowledge

Sound knowledge of biology and chemistry equivalent to undergraduate Level 1 units.

Equivalent Units

300333 - Introductory Plant Physiology, 300609 - Plant Physiology

....

Plants are the primary producers of terrestrial ecosystems and the key moderators of climate change. Hence, it is vital for students to appreciate how plants produce sugars and interact with their environment. This unit will introduce students to how plants fix and allocate carbon and energy, acquire water and mineral nutrients, and conduct water and organic compounds, the key determinants of plant growth. Students will also learn about the role of hormones in plant development and response to the environment. This knowledge is crucial for understanding how crop productivity and ecosystem function will be affected by environmental change.

401117.1   Podiatric Clinical Block

Credit Points 20 **Level** 4

Prerequisite

400929.2 Podiatric Practice 1 AND **400930.3** Podiatric Practice 2 AND **401183.1** Podiatric Surgery

Corequisite

401184.1 The High Risk Foot

Equivalent Units

400928 - Podiatric Clinical Block

Special Requirements

Prior to enrolling in this unit, all students must have a National Police Certificate, a Working with Children Check, Student Declaration and a First Aid Certificate (including advanced resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. Students must meet all inherent requirements for the podiatry course.

....

This unit is the major clinical placement unit in the 4th year of the program. Students will participate in clinical activities in public and private sector placements. The unit builds on previous clinical and academic knowledge to further develop students' clinical reasoning skills encouraging appropriate selection of assessment techniques to diagnose, treat and provide optimal health outcomes. Students under supervision will manage foot and lower limb pathologies across the scope of practice including treating diverse patient cohorts and complex cases (including the

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 433

high risk foot) transitioning towards a competent graduate entry podiatrist.

401115.1   Podiatric Paediatrics and Sports Medicine

Credit Points 10 **Level** 4

Prerequisite

400929.2 Podiatric Practice 1 AND **400930.3** Podiatric Practice 2 AND **401181.1** Pathomechanics and Podiatric Medicine

Corequisite

401114.1 Podiatric Practice 3

Incompatible Units

400939 - Podiatric Techniques 3A, 400940 - Podiatric Techniques 3B

Special Requirements

To be able to enrol in this unit, all students must have a National Police Certificate, a Working with Children Check, Student Declaration and a First Aid Certificate (including advanced resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff. Students must meet all inherent requirements for the podiatry course.

....

This unit will introduce students to clinical and theoretical foundations of biomechanical alignment, trauma, psychological and behavioural factors leading to pain and restricted function of the foot and lower extremity affecting daily living activities. Particular focus will be placed on the mechanics, diagnosis and treatment options of problems experienced in paediatrics and sports in normal daily activities or the sporting arena. This integration will enhance the previously taught assessment and diagnostic techniques in the development of appropriate management and treatment programs of the lower extremity in different populations.

400929.2   Podiatric Practice 1

Credit Points 10 **Level** 3

Assumed Knowledge

Functional Anatomy

Prerequisite

400933.2 Podiatry Pre-Clinical

Corequisite

400942.3 Introduction to Podiatry and Clinical Education

Equivalent Units

400141 - Podiatry Practice 1

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate baseline competencies in patient assessment and infection control procedures. The podiatric practice units have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

....

This unit will introduce students to the first clinical unit in the series of 4 where students will demonstrate basic competencies in patient assessment, communication and management skills. The student will also be introduced to basic skills in mechanical therapy as part of the clinical therapies unit. In this unit students will participate in clinics as informed and guided observers, and will commence elementary assessment and diagnostic skills. The activities will be divided into four areas: new patient clinics, clinical tutorials, clinical therapies and a one-week external clinical placement at the end of semester.

400930.3   Podiatric Practice 2

Credit Points 10 **Level** 3

Assumed Knowledge

Functional Anatomy, Podiatry Pre-clinical, Podiatric Techniques 1A, 1B

Prerequisite

400929.2 Podiatric Practice 1

Equivalent Units

400145 - Podiatric Practice 2

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate baseline competencies in patient assessment and infection control procedures. The podiatric practice units have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover accredited educational body 4) NSW Health Department Category A Vaccinations

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 434

This unit will further develop students assessment skills encouraging the student to make the appropriate selection of techniques (biomechanical assessments) and to introduce the student to the diagnosis and management of a variety of simple foot pathologies. In this unit, the second of the four clinical practice units, students will participate in assessments of patients under supervision and continue with the management of foot pathologies. Clincial activities will be divided into five areas: General Medicine Clinic, Biomechanical Assessment Clinical, Tutorial, Clinical Therapies and External Clinical Placement.

401114.1   Podiatric Practice 3

Credit Points 10 **Level** 4

Prerequisite

400930.3 Podiatric Practice 2 AND **401183.1** Podiatric Surgery

Incompatible Units

400931 - Podiatric Practice 3

Special Requirements

Prior to enroling in this unit, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including advanced resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff.

....

This unit is the third of four clinical practice units. Building on previous clinical units and academic knowledge the unit develops student assessment skills encouraging the student to make the appropriate selection of assessment techniques to diagnose, treat and provide short and long term health outcomes. Students will continue to participate in clinical activities under supervision to manage foot pathologies with increased scope to evaluate and manage more complex cases (i.e. surgery, paediatrics, high risk foot). Clinical activities include UniClinic sessions, Clinical Therapies, Tutorials, and External Clinical Placement.

401118.1   Podiatric Practice 4

Credit Points 10 **Level** 4

Prerequisite

401114.1 Podiatric Practice 3 AND **401184.1** The High Risk Foot AND **401183.1** Podiatric Surgery

Corequisite

401115.1 Podiatric Paediatrics and Sports Medicine AND **401116.1** Dermatology and Gerontology

Incompatible Units

400932 - Podiatric Practice 4

Special Requirements

Prior to enroling in this unit, all students must have a National Police Certificate, a Working with Children Check Student Declaration and a First Aid Certificate (including advanced resuscitation). To be eligible to undertake fieldwork placements in public hospitals, students must comply with NSW Health vaccination requirements and be prepared to submit a completed Adult Immunisation Card to placement institutions. Details of necessary vaccinations are available from NSW Health. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff.

....

This unit is the final of four clinical podiatric practice units. The unit builds on student clinical reasoning encouraging the student to make the appropriate selection of assessment techniques to diagnose and manage foot and lower limb pathology. Students under supervision will consolidate skills managing diverse patient cohorts and complex cases (including surgery, paediatrics, sports injury and the high risk foot) transitioning towards a competent graduate entry podiatrist. Clinical activities include UniClinic sessions, Clinical Therapies, Clinical tutorials, and External Clinical Placement.

401119.1   Podiatric Professional Practice Studies

Credit Points 10 **Level** 4

Prerequisite

401114.1 Podiatric Practice 3

Corequisite

401117.1 Podiatric Clinical Block AND **401118.1** Podiatric Practice 4

Incompatible Units

400934 - Podiatric Professional Practice Studies

....

This unit will introduce students to the principles of professional development and appropriate requirements to function as a registered podiatrist. As podiatrists may work as a primary provider, as part of a multidisciplinary team, in the public or private health care setting, they require extensive knowledge of many aspects of the management of a practice or business. During seminars, students will be introduced to a number of principles specific to professional, ethical and legal issues associated with working as a podiatrist, and practice and workplace administrative policies and procedures.

401183.1   Podiatric Surgery

Credit Points 10 **Level** 3

Assumed Knowledge

Completion of all core units to this semester/ year of study is assumed knowledge

Prerequisite

400869.3 Human Anatomy and Physiology 2 AND **400881.3** Functional Anatomy AND **400929.2** Podiatric Practice 1 AND **400981.2** Clinical Pharmacology

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 435

Corequisite

401182.1 Pharmacology for Podiatrists

Incompatible Units

400937 - Podiatric Techniques 2A

Special Requirements

Students must be enrolled in 4708 Bachelor of Podiatric Medicine and 4709 Bachelor of Podiatric Medicine (Honours). For registration, students must be competent in performing partial nail avulsions as an accreditation requirement for state registration to practice as a podiatrist. It is essential that students have been able to demonstrate baseline competencies in theoretical content, patient management, infection control and safe work practices (i.e completed the preceding podiatric practice unit and prerequisite units). To be able to enrol in this unit, all students must have a First Aid Certificate (including advanced resuscitation and Anaphylaxis component).

....

This unit will introduce students to local anaesthesia, the theory of surgical procedures and the practice of skin and nail surgical techniques. As such, this unit allows students to assess patients' suitability for administration of local anaesthesia; understand procedures involved in obtaining voluntary consent, appreciate, and reasonably predict and describe the possible adverse effects of administering local anaesthesia. Surgery will focus the medico-legal requirements, principles of theatre protocol, peri-operative and post-surgical management of the patient and nail and skin surgery, in preparation for student undertaking surgery during Podiatric Practice 3 and 4.

400933.2   Podiatry Pre-Clinical

Credit Points 10 **Level** 2

Assumed Knowledge

Introduction to Podiatry, Anatomy, Communication skills and Biomechanics.

Prerequisite

400905.1 Introduction to Podiatry AND **400881.1** Functional Anatomy AND **400871.1** Professional Health Competencies AND **400732.1** Communication in Health AND **400882.1** Introduction to Biomechanics

Incompatible Units

400133 - Podiatry Pre-clinical Studies

Special Requirements

Podiatry specific - students will be participating in patient assessment and management. It is essential that they have been able to demonstrate baseline competencies in patient assessment and infection control procedures. The podiatric practice units have been designed to be an integrated suite of units where one unit builds on the clinical competencies of the others. Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010. 3) Hold a Senior First Aid Certificate and completed the OxyViva Resuscitation and EpiPen components as administration by a work cover

accredited educational body 4) NSW Health Department Category A Vaccinations

....

This unit will build on the skills introduced in Year 1 with an emphasis on clinical competencies in patient communication and management. The clinical component will cover an introduction to basic treatment skills of skin conditions and the evaluation of functional anatomy, gait, cursory examinations and communication. Introduction to general clinical treatment skills such as chair side devices and strapping and removable pads to more complex skills such as the manufacture of non-cast orthotic devices will be covered.

400238.3   Policy, Power and Politics in Health Care Provision

Credit Points 10 **Level** 7

Equivalent Units

HC815A - Policy, Power and Politics in Health Care Provision

Special Requirements

Students must be enrolled in a postgraduate course. Students enrolled in course 4673 must have passed the following three units before they can enrol in this unit - 400220 Contemporary Professional Practice in Mental Health Nursing and 400206 Evidence-based Nursing and 400235 Leadership in Clinical Practice.

....

This unit enables students to gain an understanding of the political and social constructions that underpin health care services such as social determinants of health. It also provides students with the opportunity to explore and critically analyse issues related to the development, implementation and outcomes of health and aged care policies.

101895.1   Political Economy of Development

Credit Points 10 **Level** 7

....

The unit introduces students to the main theories and the diverse political economy dimensions of development. It consists of three modules. The first deals with key concepts that interrogate the meaning of development, origins of prosperity and the concepts of poverty, inequality and redistribution, which are contentious in their applications to various groups. The second module examines core issues in the political economy of development, which include globalisation, foreign aid, democracy, conflict and the role of the state. The last module engages with pertinent case studies focusing on Asia, the Pacific as well as problems with development in the Western world.

102384.1   Political Philosophy

Credit Points 10 **Level** 7

....

According to Aristotle's famous definition, the human is a political animal. Since the first theorization of the political in ancient Greek philosophy, politics has been thought from a

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 436

variety of different angles. These range from traditional approaches such as the forms of government or the ways in which the sovereign can exercise power, to contemporary alternative approaches, such as theories of radical democracy which emphasize the participatory and agonistic aspects of the political. This unit will cover some fundamental texts and ideas in political philosophy.

101797.2   Political Terror

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Since the terrorist attacks of 11 September, 2001, threats of terrorism have been entrenched in both headlines and the collective psyche. Across the globe, terrorism, anti-terrorism and the politics of fear are influential factors in the formulation of domestic and foreign policies. The current wave of terror and counter-terror raises important questions. What do we mean by terror? Is the war on terror really a war like no other? Is the current terrorist threat unprecedented? This unit will examine historical precedents and theories of terrorism.

100277.4   Politics of Australia and Asia Relations

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

In this unit students will become familiar with Australian diplomacy and appreciate the range of pressing historical, political and cultural issues that affect Australia's place in the Asia Pacific region. It explores the factors that have shaped Australia's relationships with key countries in the region and considers the vital impact of political actors and their ideological stances. In developing a depth of knowledge on the importance of Australia's regional policies, this unit provides students with the opportunity to be involved in a simulation task dealing with a 'hot topic' for Australia's relations within the Asia Pacific region.

100278.2   Politics of Post-War Japan

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The unit studies the post-war Japanese political experience: a vanquished country transformed into an economic super power with a 'peace' constitution and now in relative decline. In particular the unit will examine the impact of the dominance of the Liberal Democratic Party on domestic politics and the intersection between domestic political developments and security and foreign policy matters.

100882.3   Politics of Sex and Gender

Credit Points 10 **Level** 2

Equivalent Units

63196 - Sex, Gender and Social Relations

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit introduces students to the contemporary analysis of sex, gender, and sexualities. Students study key concepts and learn to apply these concepts in the analysis of contemporary issues. Concepts covered include the meanings of sex, gender and sexuality; gender as 'doing'; equality and difference; gendered bodies; biology and social constructionism; and intersectionality (how gender intersects with other differences such as ethnicity, sexuality and class).

101985.1   Politics, Power and Resistance

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines the effects of politics on society and of the social on politics. Politics is understood as a struggle for defining how we live in common with others. We examine how power is attained and maintained and how some ideologies dominate over others to shape opportunities for challenging the status quo. Our focus is the contemporary nation-state in the context of globalisation, increased transnationalism, and shifting balances of power. Key themes include economic and social inequality in the modern state, the colonial power matrix, discipline and punishment, gender and race, and resistance to oppression. Each week will combine theoretical approaches and case-study based 'perspectives' on the topic.

400870.2   Population Health and Society

Credit Points 10 **Level** 1

Equivalent Units

400781 - Dynamics of Health, 400270 - Meanings of Health and Models of Care, 700066 - Population Health and Society (UWSC)

....

NOTE: The ONLINE offering is currently only available to students in the Public Health Key program. This unit deals with foundational concepts and factors relating to population health in our society. Issues that determine both social and environmental aspects of disease, health and wellbeing will be examined. Contemporary problems impacting on states of health will be explored, including current day trends in communicable and non-communicable disease.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 437

700066.3 Population Health and Society (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

400870 - Population Health and Society, 400781 - Dynamics of Health, 400270 - Meanings of Health and Models of Care

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit deals with foundational concepts and factors relating to population health in our society. Issues that determine both social and environmental aspects of disease, health and wellbeing will be examined. Contemporary problems impacting on states of health will be explored, including current day trends in communicable and non-communicable disease.

101987.1 Postcolonial Australian Cinema

Credit Points 10 **Level** 3

Equivalent Units

100990 - Cinema, Culture, Memory

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit will examine the role of cinema in forming images of national and cultural identity. The unit will explore the development of Indigenous and postcolonial cinema in Australia. The unit will discuss political debates and issues in postcolonial Australian cinema, and will raise questions about the nature of memory as it is mediated by cinematic experience, the representation of history, and the history of representation of indigenous cultures and peoples. The unit will examine these questions through a study of postcolonial Australian cinema produced by both Indigenous and non-Indigenous filmmakers.

300869.1 Postharvest

Credit Points 10 **Level** 3

Assumed Knowledge

This unit assumes that students have a basic knowledge of biology, plant morphology and anatomy, chemistry and mathematics. Students are also assumed to be familiar with the World Wide Web and the tools for database searching and basic computer packages such as WORD and EXCEL.

Equivalent Units

300452 - Postharvest

Special Requirements

Successful completion of 40 credit points

....

This unit explores the factors affecting the retention of quality of fresh fruit, vegetables and cut flowers from grower to consumer. Topics include: the role of fresh produce for the health and happiness of people; the growth and maturation and physiology of fresh produce; the importance of managing temperature and relative humidity of the storage environment; the responses of fresh produce to changes in temperature and water loss; the role of ethylene in fruit ripening and senescence; the practical issues of assessing harvest maturity; packaging; distribution and the control of postharvest diseases and pest and the concepts of market access.

300052.2 Power and Machines

Credit Points 10 **Level** 2

Prerequisite

300005.2 Circuit Theory

Equivalent Units

84239 - Introduction to Power and Machines

....

This unit introduces basic concepts of power and machines, including an introduction to modern power systems and transformers, and fundamentals of electromechanical energy conversion. It also covers magnetic circuits, modern permanent magnet materials and their characteristics, and balanced and unbalanced three-phase power systems.

300772.1 Power Electronics

Credit Points 10 **Level** 4

Assumed Knowledge

Basic knowledge of power frequency devices and systems

Prerequisite

300052.2 Power and Machines AND **300025.3** Electronics

....

The unit covers various types of power electronics systems, their applications and use in Electrical Drive Systems. It also covers application considerations and modern developments in electronic systems. This course provides the fundamentals of Power Electronics and Industrial Electronics.

300995.1 Power Quality

Credit Points 10 **Level** 4

Assumed Knowledge

Students are expected to be familiar with basic power system calculations including balanced and unbalanced three-phase systems

Special Requirements

Students must be enrolled in courses 3689 Bachelor of Engineering, 3740 Bachelor of Engineering (Honours) or 3690 Bachelor of Engineering Advanced (Honours) and must have successfully completed 150 credit points.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 438

Western Sydney University

This unit is to introduce students to power quality phenomena such as voltage sag/swell, distortions, unbalance, and flicker that occur in power systems. The unit also introduces terms and definitions associated with power quality, following which each phenomenon, that is, voltage sag/swell, transient overvoltage, and harmonics. In addition, flicker is presented and discussed in detail for students to understand the sources and impact of these occurrences on power system as well as typical mitigation techniques. Finally, students are introduced to power quality benchmarking, monitoring and assessment.

300771.1   Power Systems

Credit Points 10 **Level** 3

Assumed Knowledge

Basic knowledge of power frequency devices and systems

Prerequisite

300052.2 Power and Machines

....

This unit introduces a global picture of electrical energy systems. This unit deals with the basic processes of generation and distribution, power system analysis and planning.

101947.1   Pragmatics

Credit Points 10 **Level** 2

Prerequisite

101945.1 Introduction to Linguistics

Equivalent Units

101441 - English Semantics and Pragmatics

....

This is a core unit of the Linguistics Major which introduces students to pragmatics, the study of language use in context. It combines theoretical elements with practical applications through examples, exercises and authentic data analysis, which enable students to understand the significance of this field of linguistics to language professions, such as interpreting and translation and language teaching.

301034.1   Predictive Modelling

Credit Points 10 **Level** 3

Special Requirements

Co-requisite Unit: 301108 Thinking About Data for students enrolled in 3734 Bachelor of Data Science. Pre-requisite Unit: 300700 Statistical Decision Making or 200263 Biometry or 200032 Statistics for Business for students not enrolled in 3734 Bachelor of Data Science.

....

Predictive Modelling forms the basis for understanding relationships between input characteristics and outcomes. Predicting insurance risk, defaults on loans and probability of life on other planets are all examples of Predictive Modelling. In this unit we will look at traditional statistical approaches and some machine learning for predictive modelling.

401001.1   Primary Health Care in Action

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4691 Bachelor or Nursing, 4693 Bachelor of Nursing (Advanced) or 4684 Bachelor of Midwifery. Unitrack students may study this unit as a miscellaneous unit.

....

This unit introduces nursing and midwifery students to Primary Health Care (PHC) as a social model of health and a World Health Organization (WHO) strategy for achieving just and humane health care. The unit explores the impact and relevance of PHC as a framework for organising an Australian health care system that decreases health inequities and optimises the health of all people. Students will examine the dimensions of PHC that assist in establishing collaborative partnerships in which people are supported to take responsibility for their health, with a specific focus on Aboriginal and Torres Strait Islander peoples.

200525.3   Principles of Economics

Credit Points 10 **Level** 1

Equivalent Units

200076 - Introductory Economics, 200046 - Microeconomics, EC102A - Principles of Economics

Special Requirements

External offerings for this unit during Autumn and Spring are only available to students who are enrolled in a Property courseor specialisation.

....

This unit is an introduction to economic concepts and contemporary economic issues. It introduces students to basic concepts such as markets and their operation, the behaviour of firms, the efficiency and potential failings of markets, the role of government, key macroeconomic variables and problems such as recessions and unemployment. It illuminates concepts via application to contemporary economic issues and debates over different theoretical perspectives. This unit also exposes students to recent developments and policy controversies in economics.

300980.1   Principles of Evolution

Credit Points 10 **Level** 2

Prerequisite

300802.1 Biodiversity AND **300816.1** Cell Biology

Special Requirements

Students are required to have laboratory coat and covered shoes for practicals

....

This unit is designed to impart an understanding of the core concepts in modern evolutionary theory, and an appreciation of the central position it plays in unifying all sub-disciplines of biology. The unit will cover modern synthesis, phylogenetics, phylogeography, origin of variation, genetic drift, natural selection, and coevolution,

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 439

with a major emphasis on evolutionary mechanisms and analytical techniques.

100483.2 Principles of Professional Communication 1

Credit Points 10 **Level** 1

Equivalent Units

63901 - Written and Oral Presentation 2, H1745 - Business Skills for Professionals, J1751- Professional Skills for Science and Technology

....

The unit provides students with an introductory understanding of a range of communication theories and practices necessary for academic work and professional success.

700040.3 Principles of Professional Communication 1 (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

63901 - Written and Oral Presentation 2, H1745 - Business Skills for Professionals, J1751 - Professional Skills for Science and Technology

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit provides students with an introductory understanding of a range of communication theories and practices necessary for academic work and professional success.

300979.1 Principles of Zoology

Credit Points 10 **Level** 2

Prerequisite

300802.1 Biodiversity

Special Requirements

Students are required to have laboratory coat and safety goggles.

....

Explores the diversity of invertebrate and vertebrate life in a phylogenetic context. Taxonomy, anatomy, ecology, ethology and physiology of major groups of animals are examined. Patterns will be examined from an evolutionary perspective and the unit will focus on structure and function to examine specialisations and adaptations of animals to their environment. The unit will use lectures and laboratory sessions to allow an interactive appreciation of the diversity of biological mechanisms and processes in the Animal Kingdom.

200575.3 Processes and Evaluation in Employment Relations

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Equivalent Units

200381 - Human Resources Development Seminar

....

This unit applies theory and skills developed throughout the discipline in Human Resource Management to real-world organisational and policy challenges and opportunities. Students will develop and use employment relations concepts and 'metrics' to design implementation plans and to evaluate policies, practices and change initiatives. Evaluation of non-employment relations policies and procedures in terms of their potential impact on employment relations performance will also be assessed. Sustainable and competitive employment relations will be evaluated at organisational, local, regional, national and industry levels.

401003.2 Professional Communication

Credit Points 10 **Level** 1

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced).

....

This unit develops the written and interpersonal skills of students in preparation for professional practice. Students are introduced to the concepts of language, literacy and learning styles that are required for both academic and professional life. Cultural sensitivity, safety and competence that facilitate appropriate intercultural communication are explored within the context of contemporary healthcare.

300975.1 Professional Competencies

Credit Points 10 **Level** 1

Equivalent Units

300461 Engineering & Industrial Design Practice; 300034 Introduction to Professional Practice; 300674 Engineering, Design & Construction Practice; 700038 Engineering Design & Construction Practice (UWSC); 700107 Engineering, Design & Construction Practice

....

This unit encourages students to explore professional responsibilities and challenges faced by construction professionals. Students are introduced to the construction management profession through the use of industry case studies and project problems. Students engage in a research and problem-solving task that addresses sustainability imperatives and fosters fundamental research and communication skills. Special emphasis is placed on academic and business literacy, project management and teamwork which equip students for subsequent academic and professional contexts.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 440

700154.1 Professional Competencies (UWSC)

Credit Points 10 **Level** 1

Equivalent Units

300674 - Engineering, Design & Construction Practice, 300975 - Professional Competencies,. 700038 - Engineering, Design & Construction Practice (UWSC), 700107 - Engineering, Design & Construction Practice (Assoc Deg)

Special Requirements

Students must be enrolled at UWSCollege.

....

This unit encourages students to explore professional responsibilities and challenges faced by construction professionals. Students are introduced to the construction management profession through the use of industry case studies and project problems. Students engage in a research and problem-solving task that addresses sustainability imperatives and fosters fundamental research and communication skills. Special emphasis is placed on academic and business literacy, project management and teamwork which equip students for subsequent academic and professional contexts.

700154.2 Professional Competencies (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

300674 - Engineering, Design & Construction Practice, 300975 - Professional Competencies,. 700038 - Engineering, Design & Construction Practice (UWSC), 700107 - Engineering, Design & Construction Practice (Assoc Deg)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit encourages students to explore professional responsibilities and challenges faced by construction professionals. Students are introduced to the construction management profession through the use of industry case studies and project problems. Students engage in a research and problem-solving task that addresses sustainability imperatives and fosters fundamental research and communication skills. Special emphasis is placed on academic and business literacy, project management and teamwork which equip students for subsequent academic and professional contexts.

300578.3 Professional Development

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of systems analysis and design.

Equivalent Units

300372 - Professional Preparation and Project Management

Special Requirements

Successful completion of 140 credit points. For students enrolled in 3663 Graduate Certificate in Health Informatics, 3645 Graduate Diploma in IT and 3646 Graduate Certificate in ICT this pre-requisite is not applicable.

....

This is a final year unit that builds on foundation and intermediate computing units to prepare students for professional experience. The unit covers the content in three modules as 1) Ethics and Professional Code of Conduct, 2) Project Management, and 3) Legal, Social, Environmental issues, Quality Assurance and IT Compliance. The content covered in these three modules are carefully designed to fill in the gaps in knowledge that is not so far covered in previous units in preparing students for the challenging projects units and professional working life ahead. This unit is a pre-requisite to the capstone project, covered in Professional Experience Project unit.

300579.5 Professional Experience

Credit Points 10 **Level** 3

Assumed Knowledge

Software development methodologies; Software analysis and design modelling tools and techniques; Programming languages; Implementing databases management systems; Software construction and testing.

Prerequisite

300104.4 Database Design and Development AND **300582.2** Technologies for Web Applications AND **300578.3** Professional Development

Equivalent Units

300097 - Computing Project 1

Special Requirements

This is a final year capstone unit. Therefore in addition to the successful completion of the pre-requisite units, students should have successfully completed 140 credit points with at least 30 credit points of Level 2 units owned by the School of Computing, Engineering & Mathematics. Due to the capstone nature students must be enrolled in 3506 Bachelor of Computer Science, 3633 Bachelor of Computer Science, 3639 Bachelor of Information and Communications Technology, 3661 Bachelor of Information and Communications Technology (Enhanced Pathway), 3654 Bachelor of Information and Communications Technology/Bachelor of Arts, 3655 Bachelor of Information and Communications Technology/Bachelor of Business and Commerce, 3656 Bachelor of Information and Communications Technology/Bachelor of Business and Commerce (Accounting), 3657 Bachelor of Medical Science/Bachelor of Information and Communications Technology, 3687 Bachelor of Information Systems or 3711 Bachelor of Information and Communications Technology (Health Information Management). This is not an open elective.

....

Professional Experience is a final year 'capstone' project unit. This unit provides opportunities for students to gain hands-on experience in software systems requirements

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 441

definition, analysis, design and implementation, in a real-world setting. Students work in groups, guided by an academic supervisor or an industry mentor, in achieving the goals set by the client that provides the project. Suitable projects are sourced from external organisations or within UWS by way of giving the students professional experience in independent learning and reflective practice.

300900.1 Professional Experience (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Software development methodologies, software analysis and design modelling tools and techniques, programming languages, iImplementing databases management systems, software construction and testing, system documentation and Project Management

Prerequisite

300578.3 Professional Development

Incompatible Units

300136 IT Support Practicum, 300579 Professional Exp, 300098 Computing Project 2, 14951 SAD Project, 14958 SAD Project, 48528 SAD Project, 54919 Computing Project A, 54920 Computing Project B, 61235 Software Eng. Project 1, J3664 Computer Project 3

Special Requirements

Students must be enrolled in 3684 Bachelor of Information and Communications Technology (Advanced), 3685 Bachelor of Computing (Information Systems) Advanced or 3688 Bachelor of Information Systems Advanced and must have successfully completed 110 credit points.

....

Professional Experience (Advanced) is a final year 'capstone' work-placement unit. This advanced unit provides the opportunity for students to gain hands-on experience in software systems requirements definition, analysis, design, implementation and project management, in an external organisation under the supervision of industry experts. During the work placement students work in a real-life project applying the theories and technical skills learned in previous units in an industry setting. Students are allowed to propose a work-placement of their choice within an external organisation. School will assess the suggested work-placement for its suitability in meeting the set unit outcomes, prior to approval.

400871.2 Professional Health Competencies

Credit Points 10 **Level** 1

Equivalent Units

700067 - Professional Health Competencies (UWSC)

....

NOTE: The ONLINE offering is currently only available to students in the Public Health Key program. This unit introduces skills for studying and working in health science. Students will gain an understanding of the interdisciplinary and multi-disciplinary nature of health science practice in the 21st century, and how this interacts with the specialty health professions, client and community expectations of health care and employment opportunities in health

science. Students will learn foundation competencies that will underpin their academic development and their safe, responsible and ethical practice in health science service environments.

700067.2 Professional Health Competencies (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

400871 - Professional Health Competencies

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit introduces skills for studying and working in health science. Students will gain an understanding of the interdisciplinary and multi-disciplinary nature of health science practice in the 21st century, and how this interacts with the specialty health professions, client and community expectations of health care and employment opportunities in health science. Students will learn foundation competencies that will underpin their academic development and their safe, responsible and ethical practice in health science service environments.

400783.2 Professional Pathways in Health Science

Credit Points 10 **Level** 1

Equivalent Units

400769 - Foundations of Health Sciences, 400242 - Foundation of Therapeutic Recreation, 700075 - Professional Pathways in Health Science (UWSC)

....

NOTE: The ONLINE offering is currently only available to students in the Public Health Key program. The unit introduces students to the public health science workforce. It is essential for students to understand professional issues, history and the philosophy in health sciences: health promotion, health service management, therapeutic recreation and public health planning. This unit helps students plan what area within health science they would like to examine and study in more detail, exploring questions such as: What are the career pathways for health science students? What is a health system? What impact will changes in the health system have on a career in health science?.

700075.2 Professional Pathways in Health Science (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

400783 - Professional Pathways in Health Science, 400769 - Foundations of Health Science, 400242 - Foundations of Therapeutic Recreation.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 442

Western Sydney University

Special Requirements

Students must be enrolled at Western Sydney University, The College. National Criminal Record Check, NSW Health Vaccination Record and Working With Children Check (WWCC) must be completed prior to enrolling in this unit. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit introduces students to professional issues, history and the philosophy in health sciences: health promotion, health service management and therapeutic recreation. Theories and key concepts of health promotion, health service management and therapeutic recreation are introduced. Students will be introduced to an understanding of human development and the health science processes. Students will examine how human growth and development influences development of socio-economic, cultural, gender, environmental, health science issues. Students will begin an electronic portfolio to help them take more control over their education and assist students to make connections with their learning experiences while building critical and reflective skills.

300053.3 Professional Practice

Credit Points 10 **Level** 3

Prerequisite

300461.1 Engineering and Industrial Design Practice OR **300674.2** Engineering, Design and Construction Practice OR **300975.1** Professional Competencies

Equivalent Units

85013 - Civil and Environmental Engineering Practice 2

Special Requirements

Successful completion of 160 credit points.

....

This unit focuses on an integrated project of various sub-disciplines in key programs. The unit describes engineering and construction as professions. Theories related to contract and project management will also form a part of this unit. Throughout the semester, the focus will be on an integrated project and the development of research skills of students enrolled in this unit. This will be achieved through employment of appropriate research skills and completion of professional/technical reports.

401000.1 Professional Practice Experience 1

Credit Points 10 **Level** 1

Equivalent Units

400745 - Nursing, Health and Wellbeing

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced).

....

This unit introduces beginning students of nursing to the principles, concepts and skills used to identify, promote, maintain and support health and well-being across the lifespan.

401004.1 Professional Practice Experience 2

Credit Points 10 **Level** 1

Prerequisite

401000.1 Professional Practice Experience 1

Corequisite

401006.1 Bioscience 2

Equivalent Units

400749 - Nursing and Health Breakdown

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing or 4693 Bachelor of Nursing (Advanced). As per NSW Health and Western Sydney University: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3). Four forms completed and taken to every placement (with a copy): a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. Ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. Iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace.

....

This unit focuses on the role and skills of nursing in promoting, maintaining and supporting health across the lifespan. Principles and practices of nursing care will be applied in simulated, service learning and practice environments, particularly in the health priority areas of Injury prevention and control and obesity. Theoretical underpinnings specifically related to this unit are found in Human Relationships and Life Transitions, Bioscience 2 and Approaches to Professional Practice.

401008.1 Professional Practice Experience 3

Credit Points 10 **Level** 2

Assumed Knowledge

Foundational knowledge of primary health care, professional communication, roles and responsibilities of registered nurse and human biological and behavioural sciences.

Corequisite

401010.1 Health Variations 1

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 443

Units

Special Requirements

Pre-requisites for courses 4691 and 4693: 401000 Professional Practice Experience 1 and 401004 Professional Practice Experience 2. Pre-requisites for course 4692: 401029 Foundations for Nursing Practice. Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry. As per NSW Health and Western Sydney University: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3). Four forms completed and taken to every placement (with a copy): a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/ Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace.

....

This unit extends on the concepts and skills introduced in Year 1 nursing studies. The unit is theoretically aligned with Health Variation 1 and focuses on the role and skills of the nurse in assessing and caring for people across the lifespan who are experiencing acute but usually resolvable conditions which includes the perioperative experience. The unit integrates the perioperative experience with the National Health Priority areas relating to Arthritis and Musculoskeletal conditions; Cancer Control and Injury Management.

401012.1   Professional Practice Experience 4

Credit Points 10 **Level** 2

Special Requirements

Pre-requisites for courses 4691 and 4693: 401000 - Professional Practice Experience 1 and 401004 - Professional Practice Experience 2. Pre-requisites for course 4692: 401029 - Foundations for Nursing Practice. Co-requisite units for 4691 and 4693: 401008 - Professional Practice Experience 3 and 401010 - Health Variations 1 and 401015 - Health Variations 3. Co-requisites for 4692: 401008 - Professional Practice Experience 3, 401010 - Health Variations 1, 401015 - Health Variations 3 and 401024 - Health Variations 2 (Advanced). Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry. As per NSW Health and Western Sydney University: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1).

Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3. Four forms completed and taken to every placement (with a copy): a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/ Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace.

....

Professional Practice Experience 4 focuses on the care of people experiencing an acute exacerbation of a chronic condition. Principles and practices of nursing care will be undertaken in simulated and practice environments, particularly in the National Health Priority areas of cardiovascular disease, asthma, diabetes mellitus, arthritis, and mental health. Theoretical underpinnings specifically related to this unit are found in Promoting Mental Health and Wellbeing 1, Health Variations 2, and Health Variations 3.

401016.1   Professional Practice Experience 5

Credit Points 10 **Level** 3

Special Requirements

Pre-requisites for 4691 and 4693: 401000 - Professional Practice Experience 1, 401004 - Professional Practice Experience 2, 401008 - Professional Practice Experience 3 and 401012 - Professional Practice Experience 4. Pre-requisites for 4692: 401029 - Foundations for Nursing Practice, 401008 - Professional Practice Experience 3 and 401012 - Professional Practice Experience 4. Co-requisites for 4691 and 4692: 401018 - Health Variations 4 and 401019 - Health Variations 5. Co-requisites for 4693: 401026 - Health Variations 4 (Advanced) and 401019 - Health Variations 5. Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry. As per NSW Health and Western Sydney University: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3). Four forms completed and taken to every placement (with a copy): a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 444

NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace.

....

This unit extends the concepts and skills previously covered in years one and two. The focus of this unit is to help equip nursing students with the skills required in assessing and caring for people across the lifespan who are experiencing acute life-threatening illness and end-of-life conditions. Through a Primary Health Care approach, the unit will use national health priorities of Cardiovascular Disease, Injury Prevention and Control, Cancer control and Mental Health to exemplify the inter-relationship between acute and chronic conditions and the palliative approach to life threatening illness.

401020.1   Professional Practice Experience 6

Credit Points   10 **Level**   3

Assumed Knowledge

Year 1, Year 2 and Autumn Year 3 Nursing Studies.

Special Requirements

Pre-requisites for 4691 and 4693: 401000 - Professional Practice Experience 1, 401004 - Professional Practice Experience 2, 401008 - Professional Practice Experience 3, 401012 - Professional Practice Experience 4 and 401013 - Promoting Mental Health and Wellbeing 1. Pre-requisites for 4692: 401029 - Foundations for Nursing Practice, 401008 - Professional Practice Experience 3, 401012 - Professional Practice Experience 4 and 401013 - Promoting Mental Health and Wellbeing 1. Co-requisites for 4691 and 4692: 401016 - Professional Practice 5 and 401017 - Promoting Mental Health and Wellbeing 2. Co-requisites for 4693: 401016 - Professional Practice 5 and 401025 - Promoting Mental Health and Wellbeing 2 (Advanced). Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced) or 4692 Bachelor of Nursing Graduate Entry. As per NSW Health and Western Sydney University: First Aid Certificate. Students will need to have completed the NSW Health Special Requirements for clinical practicum attendance. At present these include: 1). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 2). A completed vaccination card with serology results attached; 3). Four forms completed and taken to every placement (with a copy): a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special

Requirement; b). Code of Conduct; c). TB Assessment Form; d). Student Undertaking/Declaration form. International students need to take an additional form: A statutory declaration signed by a Justice of the Peace.

....

This unit provides a unique opportunity to consolidate and extend their skill base in preparation for graduate practice. Additional theoretical underpinnings specifically related to this unit are found in the units: Being a Registered Nurse/Midwife and Leadership in Nursing and Midwifery.

401065.1   Professional Practice Experience A

Credit Points   10 **Level**   2

Assumed Knowledge

Basic professional practice nursing skills and knowledge.

Prerequisite

401029.1 Foundations for Nursing Practice

Special Requirements

Students must be enrolled in 4692 Bachelor of Nursing (Graduate Entry). Students must have: a). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; b).Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; c). Adult Health Immunisation Schedule; d). Code of Conduct Agreement; e). First Aid Certificate; f). Completed verification NSW ClinConnect. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived or a statutory declaration signed by a Justice of the Peace.

....

This unit provides the student with an opportunity to consolidate professional nursing practice skills in the Australian health care context and assist in meeting the minimum professional placement and practice hours required.

400968.2   Professional Practice in Aged Care and Disability

Credit Points   10 **Level**   3

Equivalent Units

400248 - Professional Practice in Aged Care, 400790 - Professional Practice in Aged Care and Disability

....

This unit provides the student with an understanding of current trends underlying policies and services in the aged care and disability industry, which will help them to

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 445

understand the dynamics of the changing aged care and disability service sector. Students will examine the strategic environments of aged care and disability to develop global and national perspectives, identify drivers of change and development, and the major players in aged care and disability policies. Students will develop an understanding of the aged care and disability competencies and determinants of well-being for aged and disabled persons, which can be used in their future roles in the health industry. Through reflections on practice in aged care and disability , students will develop an individual approach to aged care and disability service issues which they can use in the future as health care professionals.

401125.1 Professional Reasoning

Credit Points 10 **Level** 4

Prerequisite

400176.3 Occupation and Ageing AND **400162.3** Child and Adolescent Occupations

Corequisite

400910.1 Occupational Therapy Practice 3

Incompatible Units

400925 - Professional Reasoning

Special Requirements

This is a specialty unit offered as a compulsory core unit of the occupational therapy program. It is profession specific, preparing students to practice as an occupational therapist and not relevant as an elective for non-occupational therapy students. Enrolment in this unit is restricted to students enrolled in courses 4711 Bachelor of Occupational Therapy or 4712 Bachelor of Occupational Therapy (Honours).

....

This final year unit focuses on the transition from student to practitioner. The aim of this unit is to provide students with learning opportunities that will consolidate and enhance their competence in professional practice throughout their career. Professional competencies of central concern include advanced clinical reasoning skills, evidence based-practice, reflective practice, personal and career management strategies, self-directed and life-long learning. These competencies contribute positively to the effective management of graduates' clinical practice in various work contexts, and their future career paths. Acquisition of such skills will allow the graduate to direct and adapt to change in these areas.

200020.5 Professional Responsibility and Legal Ethics

Credit Points 10 **Level** 3

Corequisite

200006.2 Introduction to Law

Equivalent Units

69024 - Professional Conduct and Legal Ethics, F1002 - The Legal Context

....

This unit examines the nature of the legal profession and its role in society. It deals with the professional, legal and

ethical responsibilities legal practitioners owe to the law, the courts, their clients and to fellow practitioners, as well as the state and society at large. Students will be able to explain and evaluate the law and practice of legal practitioners, by reference to key topics, such as: professionalism; legal ethics; the history, structure and regulation of the legal profession; and the interpersonal, psychological and cultural factors affecting lawyering. In addition students will be able to demonstrate the process of ethical decision making by selecting and using ethical decision making tools in a legal context.

400786.2 Professional Transition Project

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in the final semester of a Bachelor of Health Science course.

....

This unit is designed to assist students to make the transition from undergraduate student life to professional life. The student centred learning approach used in this unit enables students to focus their own learning styles and personal capabilities. Students will explore the strengths and weaknesses of their own learning styles and develop strategies to strengthen their personal learning and teaching capabilities for use as professionals. A structure for developing professional performance will be introduced that includes: management skills, interpersonal skills, problem solving skills, project and procedure skills, personal growth, development and socialisation and education roles. Students will participate in hands-on instructor led sessions, through the E-portfolio project to reflect on and connect academic experiences with their life to anticipated graduate capability

700047.3 Programming Design (WSTC Prep)

Credit Points 5 **Level** Z

Assumed Knowledge

The ability to create a mathematical expression for a given problem scenario. This would require knowledge of basic arithmetic, percentages and simple statistical measures.

Equivalent Units

700016 - Programming Design (UWSCDip); 900009 - Programming Design (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit introduces students to the principles required for the effective design and development of solutions to computer program related problems. This unit has been developed to enhance a student's practical ability as well as build a solid theoretical foundation for further study in programming.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 446

300580.2   Programming Fundamentals

Credit Points 10 **Level** 1

Equivalent Units

300405 - Fundamentals of Programming, 300155 - Programming Principles 1, 200122 - Business Application Development 1, 700008 - Programming Fundamentals (UWSC)

....

As a first unit in computer programming, Programming Fundamentals covers the basics of developing software with an emphasis on procedural programming. Students will learn about basic data structures, the concept of algorithms, fundamental programming constructs, common programming language features and functions, program design and good programming style. A high level programming language is combined with a highly visual framework to teach problem solving using software.

300581.4   Programming Techniques

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals

Equivalent Units

300156 - Programming Principles 2

Incompatible Units

300903 - Programming Techniques (Advanced)

....

This unit is intended as a second unit of study in programming. It builds on a basic understanding of procedural programming as would be developed in a first unit. This unit continues the development of programming skills and methodologies required for professional programming and for further study in later computing units. Topics covered include multi-dimensional arrays, file I/O, searching and sorting, and an introduction to object-oriented programming involving classes and inheritance.

300903.1   Programming Techniques (Advanced)

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals

Incompatible Units

300581 - Programming Techniques

Special Requirements

Students must be enrolled in 3685 Bachelor of Computing (Information Systems) Advanced or 3684 Bachelor of Information and Communication Technology (Advanced)

....

This unit is intended as a second unit of study in programming. It builds on a basic understanding of procedural programming as would be developed in a first unit. This unit continues the development of programming skills and methodologies required for professional

programming and for further study in later computing units. Topics covered include multi-dimensional arrays, file I/O, searching and sorting, and an introduction to object-oriented programming involving classes and inheritance. Students in this advanced unit will also investigate and apply advanced concepts such as function overloading and recursion.

700257.1   Programming Techniques (WSTC)

Credit Points 10 **Level** 2

Prerequisite

700008.1 Programming Fundamentals (UWSC)

Equivalent Units

300581 - Programming Techniques; 300156 - Programming Principles 2

Incompatible Units

300903 - Programming Techniques (Advanced)

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in the Extended Diploma courses must have passed 40 credit points in order to enrol in this unit.

....

This unit is intended as a second unit of study in programming. It builds on a basic understanding of procedural programming as would be developed in a first unit. This unit continues the development of programming skills and methodologies required for professional programming and for further study in later computing units. Topics covered include multi-dimensional arrays, file I/O, searching and sorting, and an introduction to object-oriented programming involving classes and inheritance

300727.2   Project Management

Credit Points 10 **Level** 3

Assumed Knowledge

An understanding of basic knowledge in building and construction.

Equivalent Units

MG313A - Project Management

....

This unit is to give students an understanding of appropriate methods of managing construction projects and to develop skills in using these methods on the type of projects the students expect to undertake in their professional careers. Content: Major knowledge areas of project management.

401013.1   Promoting Mental Health and Wellbeing 1

Credit Points 10 **Level** 2

Assumed Knowledge

Primary health care, professional communication, foundational concepts in human behavioural science and their application to nursing or midwifery practice, roles and responsibilities of registered nurse or midwife.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 447

Units

Equivalent Units

400759 - Mental Health Nursing 1

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4693 Bachelor of Nursing (Advanced), 4692 Bachelor of Nursing Graduate Entry or 4684 Bachelor of Midwifery.

....

This unit introduces students to the care of individuals with mental health and wellbeing concerns. The National Mental Health Policy 2008 provides the population framework to focus on a complex range of determinants and consequences of mental health and illness in Australia. The principles of recovery and the professional use of self in everyday collaborative practice will be considered. The unit will offer an introduction to altered mood, perception and thinking and caring for individuals with depression, anxiety and substance use problems. Students will gain knowledge of the stress vulnerability model of mental health concerns, risk assessment and management.

401017.1 Promoting Mental Health and Wellbeing 2

Credit Points 10 **Level** 3

Assumed Knowledge

Year 1 and Year 2 Undergraduate Nursing Studies.

Equivalent Units

400762 - Mental Health Nursing

Special Requirements

Pre-requisites for 4691: 401000 - Professional Practice Experience 1, 401004 - Professional Practice Experience 2, 401008 - Professional Practice Experience 3, 401012 - Professional Practice Experience 4 and 401013 - Promoting Mental Health and Wellbeing 1. Pre-requisites for 4692: 401029 - Foundations for Nursing Practice, 401008 - Professional Practice Experience 3, 401012 - Professional Practice Experience 4 and 401013 - Promoting Mental Health and Wellbeing. Students must be enrolled in 4691 Bachelor of Nursing or 4692 Bachelor of Nursing Graduate Entry. Students must hold: 1). Students are required to complete a Working with Children Check leading to the issuance of a clearance number under the category of volunteer. Students will need to: i. Access the Commission for Children and Young People website and complete an online application form to generate an application number. Ii. Present an application number and identification to a NSW Motor Registry or Government Access Centre prior to issuance by mail of a Working with Children Check number. Iii. Submit the letter with a valid Working with Children Check number to Student Central where the document is TRIMMED and recorded in Callista as a Special Requirement; 2). Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3). Adult Health Immunisation Schedule; 4). Code of Conduct Agreement; 5). First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit builds on the foundations of mental health and wellbeing established in earlier units. The relationship between stress and vulnerability will be explored within the context of the psychotic disorders schizophrenia and bipolar affective disorder. Students will gain an understanding of how the principles of recovery, introduced in an earlier unit, are applied to caring for people with schizophrenia and bipolar affective disorder. Altered mood, perception, and thinking will be explored and evidence-based assessment tools and biological and psychosocial interventions introduced for facilitating recovery towards mental health and wellbeing.

401025.1 Promoting Mental Health and Wellbeing 2 (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Year 1 and Year 2 Bachelor of Nursing (Advanced) Studies.

Prerequisite

401013.1 Promoting Mental Health and Wellbeing 1 AND
401000.1 Professional Practice Experience 1 AND
401004.1 Professional Practice Experience 2 AND
401008.1 Professional Practice Experience 3 AND
401012.1 Professional Practice Experience 4

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced). Students must hold 1. Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010; 2. Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate; 3. Adult Health Immunisation Schedule; 4. Code of Conduct Agreement; 5. First Aid Certificate. Additional - For International Students: Police Check (with English translation) from their home country or any other country where they have lived.

....

This unit builds on the foundations of mental health and wellbeing established in earlier units. The relationship between stress and vulnerability will be explored within the context of the psychotic disorders schizophrenia and bipolar affective disorder. Students will gain an understanding of how the principles of recovery, introduced in an earlier unit, are applied to caring for people with schizophrenia and bipolar affective disorder. Altered mood, perception, and thinking will be explored and evidence-based assessment tools and biological and psychosocial interventions introduced for facilitating recovery towards mental health and wellbeing.

200874.1 Property Development Process

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed that students will have a sound knowledge of valuation practices and principles, economic theory and town planning principles.

Equivalent Units

DN310A Property Development, 200598 Property Development

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 448

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course or specialisation.

....

In this unit, students critically evaluate the property development process, from the initial development concept through to the end-use of completed development projects. Consideration is given to the implications of the property development process and development decisions from the viewpoints of developers, end users, financiers, public authorities and the community. Students acquire a theoretical understanding of the property development process, development appraisal techniques including financial and feasibility aspects, as well as an understanding of how to apply these techniques to a property scenario. Planning issues are also critically examined.

200875.1   Property Finance

Credit Points 10 **Level** 3

Assumed Knowledge

It is assumed that students will have a sound knowledge of: 1. Valuation and financial mathematics 2. Concepts of discounted cash flow analysis and application 3. Statutory valuation legislation and procedures 4. Property portfolio analysis and property investment analysis and application

Equivalent Units

CO308A Property Finance and Tax, 200597 Property Finance and Tax

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course or specialisation.

....

The aim of this unit is to provide insight into property finance in Australia and overseas. Students critically review equity and debt financing and examine the financing alternatives available, as well as methods for evaluating these alternatives. Students also examine the impact of debt financing on a property and evaluate the taxation aspects of property transactions. In addition, students gain both a theoretical and an applied understanding of an after-tax cash flow projection in this unit. International property finance is also addressed.

200749.2   Property Investment

Credit Points 10 **Level** 3

Assumed Knowledge

Students undertaking this unit require the background knowledge achieved through prior study in the general principles of valuation.

Equivalent Units

200437 - Property Investment

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course or specialisation.

....

Property Investment addresses critical issues in property investment analysis. The characteristics and fundamentals of property investment will be addressed. Students will learn and apply the concepts of property economics, market analysis, valuation, financial analysis and risk analysis in making property investment decision. The subject pays special attention to the discounted cash flow method as the basis of analysis for investment properties. Finally, students will be introduced to property finance, taxation and international property investment issues.

200012.4   Property Law

Credit Points 10 **Level** 2

Prerequisite

200006.2 Introduction to Law

Equivalent Units

69025 - Property Law, F2002 - Property Law

....

This unit deals with concepts of property and the nature of property rights including the boundaries between property and other rights and the boundaries between different forms of property. The unit content includes the doctrine of tenure and estates, native title, and legal and equitable interests in land. Specific topics to be covered include mortgages, leases, easements, freehold covenants, co-ownership, the Torrens system of statutory regulation of interests in land and the principles for resolving conflicting interests in land (priorities).

200873.1   Property Portfolio Management

Credit Points 10 **Level** 3

Assumed Knowledge

A sound understanding of commercial property.

Equivalent Units

200750 Property Portfolio Analysis (V2), 200438 Property Portfolio Analysis (V2)

Special Requirements

External offerings for this unit are only available to students who are enrolled in a Property course or specialisation.

....

This unit examines the role of property in an investment portfolio, with particular attention given to property portfolio performance analysis and property investment strategy. Indirect property investment vehicles in Australia and overseas are assessed, including Real Estate Investment Trusts, property syndicates, property securities funds and unlisted property funds. The performance analysis of both direct and indirect property is also examined to assess the strategic contribution of property to an investment portfolio.

101614.2   Psychology and Health

Credit Points 10 **Level** 1

Equivalent Units

400136 - Introduction to the Psychology of Health, 700060 - Psychology and Health (UWSC)

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 449

Units

Special Requirements

The online version of this unit is only available to students enrolled in 1793 - Bachelor of Science, Criminology and Psychological Studies.

....

NOTE: The ONLINE offering is currently only available to students in the Public Health Key program. This unit provides an introduction to the psychology of health and behaviour as relevant to the health sciences. Students will be introduced to the principles and applications of psychology and health behaviour using a developmental framework. This will be followed by an examination of the psychological aspects of injury and illness and an introduction to psychological interventions for health concerns. Emphasis is upon to understanding health status and behaviour in light of relevant theory and research.

700060.2 Psychology and Health (WSTC)

Credit Points 10 **Level** 1

Equivalent Units

101614 - Psychology and Health

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit provides an introduction to the psychology of health and behaviour as relevant to the health sciences. Students will be introduced to the principles and applications of psychology and health behaviour using a developmental framework. This will be followed by an examination of the psychological aspects of injury and illness and an introduction to psychological interventions for health concerns. Emphasis is on understanding health status and behaviour in light of relevant theory and research.

100023.5 Psychology of Language

Credit Points 10 **Level** 3

Assumed Knowledge

Solid understanding of perception, cognitive processes, and experimental design and analysis in psychology and/or a solid understanding of linguistics and research methods in linguistics.

Special Requirements

Successful completion of 120 credit points.

....

This unit acquaints students with major issues in the psychology of language. Through a series of online modules, it examines different approaches to research and theory on questions such as: the acquisition and development of language; the relationship between language and thought; bilingualism and multilingualism; speech perception and production; sign language; reading and writing; the neurophysiological underpinnings of language; patterns of language breakdown and communication disorders; social aspects of language;

language in non-human animals. The tutorials take a hands-on approach, where students learn new skills, such as reading and producing phonetic symbols, creating stimuli for use in psycholinguistic research, and analysing children's speech.

101183.3 Psychology: Behavioural Science

Credit Points 10 **Level** 1

....

Psychology is a field of scientific inquiry that uses a set of scientific techniques and methods to explain and understand the causes of behaviour. As a profession, psychology applies its knowledge to practical problems in human behaviour. This unit covers a range of topics in psychology at an introductory level including memory, perception, learning, and the workings of the brain.

101184.3 Psychology: Human Behaviour

Credit Points 10 **Level** 1

....

Psychology is a field of scientific inquiry that uses a set of scientific techniques and methods to explain and understand the causes of behaviour. As a profession, psychology applies its knowledge to practical problems in human behaviour. This unit covers a range of topics in psychology at an introductory level including: the history of psychology, intelligence, social psychology, developmental psychology, indigenous and cultural psychology, personality, and abnormal psychology.

400285.2 Public Health

Credit Points 10 **Level** 2

....

This is a flexible learning unit that deals with foundational concepts and issues relating to public health. The philosophical and historical development and the roles of public health in Australia are examined, as are the theories, policies, politics and principles that govern and inform practice. Emphasis is placed on understanding health issues and concerns in Greater Western Sydney Region as well as on national and international contexts of population health. The unit draws on current and emerging practical situations to highlight the dynamic yet continuing legacy of public health.

401193.1 Public Health Practice

Credit Points 10 **Level** 3

Assumed Knowledge

Fundamentals of public health, determinants of health, Australian health system.

Prerequisite

400285.2 Public Health

Special Requirements

Students must be enrolled in 4656 - Bachelor of Health Science (Public Health)

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 450

This unit is an online equivalent of a workplace learning (placement) unit. You will engage in workplace activities with a public health organisation by using prepared resources, online discussion and videoconferencing. In this unit you will evaluate, develop and recommend public health policy or program change. This involves the main skills you will need to work in public health; conducting needs analysis, collecting data, facilitating interviews and focus groups, managing project development, writing reports and giving presentations, in an organisational setting.

101253.3 Public Memory and Commemoration

Credit Points 10 **Level** 3

Equivalent Units

100508 - Dangerous Visions, 100995 - Dangerous Visions

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Throughout history various forms of material culture (such as art, architecture, sculpture, objects and photographs) have been used to memorialize individuals as well as to commemorate events, both personal and national. As such, an examination of commemorative works offer valuable insights into the production of public memory and history. This unit explores the particular contexts of such memorials; their meaning, design and, politics. The diverse expressions of commemoration in Australia and the consequent production of public memory provides the arena for such considerations.

300748.2 Quality and Value Management

Credit Points 10 **Level** 3

Equivalent Units

200469 - Quality and Value Management

....

Introduces students to the concepts of quality systems value management techniques and their application to the built environment. Students will gain knowledge of quality assurance and value management theories, techniques and principles so that they can apply as they enter into their professional careers.

300922.2 Quality Assurance and Food Analysis

Credit Points 10 **Level** 3

Assumed Knowledge

Students require good understanding of the principles of food preservation and HACCP (Hazard Analysis Critical Control Point).

Prerequisite

300842.2 Food Science 2

Equivalent Units

300785 - Quality Assurance and Food Analysis

Incompatible Units

300636 - Food Processing and Analysis, 300701 - Food Quality Assurance, 300500 - Quality Assurance and Food Safety, FS326A - Food Science and Technology Practicum 3.2, FS322A - Food Evaluation

Special Requirements

Students are required to have Personal Protection Equipment for attendance at practical, ie. Laboratory coat, safety goggles, enclosed shoes.

....

This unit covers the knowledge and tools required to maintain food quality. Students will develop an awareness of food laws, regulations and codes at the state, national and international levels. Students will be introduced to elementary toxicology and risk analysis as it applies to the regulation of food additives. The unit also integrates previous studies in HACCP (Hazard Analysis Critical Control Point) to develop deeper understanding of food quality assurance and quality management systems as they are applied to the control and management of the food supply. Students are introduced to the standard methods of analysis of foods as used for nutritional and quality assessment of foods. Practicals include determination of major and minor food components; functionality tests and sensory analysis of foods.

800172.1 Quantitative Methods in Neuroscience

Credit Points 10 **Level** 7

Assumed Knowledge

Students should have at least background/undergraduate knowledge in one or more of the following: mathematics, biology, chemistry, physics, physiology, electronics or similar

....

A multidisciplinary team will provide an introduction to several aspects of neuroscience including cellular, computational, behavioural and biomedical neuroscience. The program will provide a strong foundation in modern neuroscience for those wishing to pursue further independent research in the field. With a focus on real-world neuroscience research, topics include introductory biology, computational modelling, biosignal acquisition, signal processing and data mining. The unit will include lecture and laboratory work.

200045.3 Quantitative Project

Credit Points 10 **Level** 3

Special Requirements

This is an advanced project unit involving individual supervision of students. It will be restricted to students who have successfully completed 30 credit points of level 2 mathematics/statistics units from 200028 Advanced Calculus, 200033 Applied Statistics, 200030 Differential Equations, 300606 Foundations of Statistical Modelling and Decision Making, 200042 Introduction to Operations Research, 200027 Linear Algebra, 200029 Numerical Analysis and 30 credit points of level 3 mathematics/ statistics units from 200193 Abstract Algebra, 200023 Analysis, 200036 Data Mining and Visualisation, 200024

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 451

Mathematical Finance, 200022 Mathematical Modelling, 300670 Optimisation Techniques, 300671 Principles and Practice of Decision Making, 200040 Probability & Stochastic Processes, 200037 Regression Analysis & Experimental Design, 200044 Simulation Techniques, 200039 Surveys and Multivariate Analysis, 200038 Time Series and Forecasting. These restrictions are to ensure that students have sufficient mathematical maturity to undertake an independent project, and because staffing limitations preclude the unit from being offered to less prepared students.

....

In this unit, students can deepen and/or apply knowledge gained during their course and practise oral and written presentation skills. Students will carry out a project under the supervision of an academic staff member. Assisted by their supervisor, students will define the problem to be studied and then acquire, develop and/or apply the appropriate theory or methodology. They will prepare a final report presenting theoretical results or methodology, an analysis and a discussion followed by an appropriate conclusion, and a literature review or a list of references as appropriate. Students will also give a talk on their project.

300831.2   Quantitative Thinking

Credit Points 10 **Level** 1

Assumed Knowledge

Basic competence in algebraic manipulation and some familiarity with elementary probability and statistical concepts.

Equivalent Units

200191 - Fundamentals of Mathematics; 700123 Quantitative Thinking (UWSC)

Incompatible Units

300672 - Mathematics 1A

Special Requirements

Students are required to have a Scientific calculator and access to a computer with mathematical software packages installed. Students may complete the three units Quantitative Thinking, Analysis of Change and Maths 1A in the following order: 300831 Quantitative Thinking, 300830 Analysis of Change, 300672 Mathematics 1A. This means that students may complete 300831 before attempting 300830, but not after. 300830 and 300831 may be attempted before 300672, but not after. Students may not enrol in 300831 and 300830 or 300831 and 300672 or 300830 and 300672 in the same teaching session. Students enrolled in 3621 Bachelor of Engineering, 3689 Bachelor of Engineering, 3664 Bachelor of Engineering Science or 3691 Bachelor of Engineering Science may not enrol in any of the units 300830, 300831 or 300672.

....

This Level 1 unit develops the quantitative skills that underpin many fields of study in the sciences. The content covered includes basic algebra, functions, graphs, equations, linear and quadratic, introductory probability and descriptive statistics. These mathematical/statistical concepts will be revised and developed using scientific concepts such as molarity and dilution, optical density, population growth, and predator-prey models. In all aspects

of this unit, students will be developing and using critical thinking skills to solve mathematical/statistical problems set in a scientific context.

700123.2   Quantitative Thinking (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic competence in algebraic manipulation and some familiarity with elementary probability and statistical concepts.

Equivalent Units

200191 - Fundamentals of Mathematics, 300831 - Quantitative Thinking

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Students may complete 700123 Quantitative Thinking before 700108 Analysis of Change. Students may not enrol in Quantitative Thinking and Analysis of Change in the same teaching session.

....

This level 1 unit develops the quantitative skills that underpin many fields of study in the sciences. The content covered includes basic algebra, functions, graphs, equations – linear and quadratic, introductory probability and descriptive statistics. These mathematical/statistical concepts will be revised and developed using scientific concepts such as molarity and dilution, optical density, population growth, and predator-prey models. In all aspects of this unit, students will be developing and using critical thinking skills to solve mathematical/statistical problems set in a scientific context.

200486.3   Quantity Surveying 1

Credit Points 10 **Level** 2

Assumed Knowledge

Building construction including residential, light industrial and small commercial.

....

This unit is designed to develop the techniques required to measure, quantify and prepare bills of quantities for residential construction. It will help students to develop an understanding of the factors that affect the cost of building and introduces costing techniques for work on new and existing buildings.

200487.3   Quantity Surveying 2

Credit Points 10 **Level** 2

Assumed Knowledge

Building construction including residential, light industrial and small commercial as covered in the subjects Building 1, Building 2 and Quantity Surveying 1.

Prerequisite

200486.2 Quantity Surveying 1

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 452

This subject is designed to provide students with an advanced understanding of the various roles of a quantity surveyor. Students will develop an ability to apply the skills necessary to deliver both pre-contract and post-contract quantity surveying services.

300923.1   Quantum Physics

Credit Points 10 **Level** 3

Assumed Knowledge

Mathematics 1A, Mathematics 1B, Physics 1 and Physics 2

Prerequisite

300828.1 Physics 1 AND **300829.1** Physics 2

Equivalent Units

300419 - Quantum Properties of Chemical Systems

....

The unit builds on quantum concepts that have been introduced in earlier units such Physics 1,2, Nanotechnology and Chemistry. It aims at developing the student's understanding of quantum principles as they apply to hard and soft matter systems, including atoms , molecules and extended arrays such as metal and semiconductors as well as biological tissue

102191.1   Queer Culture

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Queer culture will introduce students to queer theory and provide opportunities to use these theories in the close study of cultural practice and politics. Queer theory counters the idea that people have stable sexes, genders and sexualities. Instead, queer theory argues that the experience of those that are homosexual, bisexual, transgender, and intersex highlight the frequent mis-matches in what are taken for granted to be 'normal' experiences of identity. Queer theory demonstrates the impossibility of a natural or normal sexuality, but it also demonstrates the problem with the terms 'man' and 'woman', 'male' and 'female', 'normal' and 'abnormal'. In Queer culture students will learn about queer theories and have the opportunity to apply these theories to an in-depth and personally engaging study of queer politics and activism; queer media, film and performance; and queer sex, selfhood, and identity trans/formations.

101650.3   Race in Literature

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit explores a selection of modern literary works that focus on the question of "race." Readings will allow students to learn how notions of race have shifted over time, giving particular attention to how mixed-race people challenge dyadic conceptions of racial difference. Readings may include one or more national literatures, such as American or Australian literature.

300489.2   Radio and Satellite Communication

Credit Points 10 **Level** 4

Assumed Knowledge

Physics and Materials, Mathematics for Engineers 1 and 2, Astrophysics

Prerequisite

300007.2 Communication Systems OR **300010.3** Data Networks

Equivalent Units

14297 - Satellite Communication

....

This unit is offered in alternate years. This unit will develop an understanding of the theory and practice of radio and satellite communication techniques and measurements and provide an introduction to space communication systems. It will complement the general communication engineering units, addressing advanced topics important and specific to radio and satellite communications.

102078.1   Reading Ireland in the 1990s: Fiction, Poetry, Drama

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

'Reading Ireland in the 1990s' is a level 3 unit within the English Major/Sub-major. This unit examines a range of Irish writing across several different genres - fiction, poetry and drama published during the 1990s. It will provide an opportunity for students to read and study in detail a variety of texts that assert new directions in Irish literary culture. Students will be asked to consider the ways in which these texts ask questions of national and personal self-definition in the face of Ireland's new political developments both north and south of the border, as well as attempt to analyse and understand contemporary Irish consciousness.

400201.3   Readings and Methodology

Credit Points 10 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate level or equivalent is required.

Special Requirements

Students must be enrolled in the Bachelor of Nursing (Honours).

....

This unit will broaden and deepen students understanding of research methodologies and develop research skills in order to apply these to a specific B Nursing (Honours) research project.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 453

200037.4 Regression Analysis & Experimental Design

Credit Points 10 **Level** 3

Prerequisite

200033.4 Applied Statistics OR **200052.4** Introduction to Economic Methods

Special Requirements

Essential Equipment: Scientific calculator and access to a computer with appropriate software.

....

From 2016 this unit has been replaced by 301034 Predictive Modelling. This unit covers regression analysis and experimental design. The regression section of the unit develops the theory and application of one of the most commonly used statistical tools: regression analysis. Topics covered include simple linear regression, multiple regression, and model diagnostics and selection. The experimental design section deals with completely randomized design, randomized block design, Latin square design, and factorial experiment models. Such design models are useful for applications in engineering and physical sciences and in the business and behavioural disciplines.

102202.1 Religion and Law in Contemporary Public Discourse

Credit Points 10 **Level** 7

Assumed Knowledge

Undergraduate degree or equivalent.

....

Debates over the role of religion as well as religious law in the public sphere have been ongoing themes in recent decades in many countries. Religion and law are two important yet rival sources of normative reasoning of public order in which they are constitutive, regulative and coercive forces. The unit introduces students to various understanding of the interrelations between religion and law in the societal and individual domains of the public sphere; and reflects on the contentious nature of the relationships given sensitive issues such as religious education, equal marriage, abortion, human rights. In the first part of the unit, students study the relationship between law and religion in various faiths such as Judaism, Christianity, Islam and Hinduism. The second part examines how different religious traditions interact and intersect with different legal traditions (common and civil law system) in a range of countries (for example Australia, UK, Israel, Indonesia, India, Iran).

101992.1 Religion and the Emergence of Modern Politics

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

The period from the early 1500s to the mid 1800s saw the transformation of religious culture and personal religiosity across much of Europe and America. The same period saw the emergence of the modern state system, a re-definition of the state-church and secular-religious divides, and the creation of modern political ideals of equal rights under the law, as well as the modern 'secular religion' of socialism. This unit investigates these parallel movements in Western culture, which altered the understandings both of politics and religion, and the relationships between them.

102002.1 Religion and the Origins of Modern Science

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Between about 1450 and 1700 Europe witnessed a fundamental transformation in the pursuit of natural knowledge which gave birth to what we now call modern science. The aim of this unit is to introduce students to the issues surrounding the study of the Scientific Revolution, particularly those concerning the influence of religion. How was the study of nature pursued before this historical moment? What was the influence of the Protestant Reformation upon the emergence of modern science? Students will also be introduced to the historiographic debates surrounding the validity and usefulness of the term 'Scientific Revolution'.

101005.4 Representing Crime

Credit Points 10 **Level** 3

Equivalent Units

SS233A - Representing Crime.

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit deals with the evolution of the figure of the detective and of the criminal; the development of an aesthetics of crime from the later 18th Century; the dynamic nature of fiction, film and television genres of detection. Literatures of sensation, detective fictions, true crime writing and the non-fiction novel will all be examined to allow an in-depth analysis of the changing ethical and psychological character of the detective, and of his nemeses. The crime story in film, television and in other new media may also be addressed to facilitate an analysis of changing cultural contexts for the crime story.

101917.1 Representing Everyday Life in Literary and Visual Cultures

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 454

This unit explores how the realm of everyday life has been imagined and represented in a range of literary traditions and visual and media cultures. It examines what we understand by this concept, realist and experimental approaches to its representation, and how everyday life is shaped by various historical, social and cultural factors (e.g. technology, gender, class, war). With a focus on modern and contemporary texts and contexts, students will study primary works in relation to key theories of the everyday. Possible topics include: Victorian realism, Surrealism, stream of consciousness narration, social documentary photography, social realist cinema, postmodern narrative, blogs.

800166.1   Research Design 1: Theories of Enquiry

Credit Points 10 **Level** 5

Special Requirements

Students must be enrolled in 8083: Bachelor of Research Studies/Master of Research

....

This unit examines research methodologies, philosophies of social sciences, science and the humanities, and considers how they inform research. Students will acquire advanced disciplinary understanding and awareness of how research is carried out. It seeks to develop students' understanding of the contexts in which quantitative, qualitative, critical inquiry, observation-driven investigations and practice based research can be undertaken and the abilities to analyse, conduct, and evaluate these forms of research. Upon completion of the unit the student will be able to demonstrate competence in method literacies as well as the application of research skills.

800169.1   Research Design 2: Practices of Research

Credit Points 10 **Level** 5

Prerequisite

800166.1 Research Design 1: Theories of Enquiry

Special Requirements

This unit must be completed in the final semester of coursework before commencement of the research year. Students must be enrolled in 8083 Bachelor of Research Studies/Master of Research.

....

This unit builds upon Research Design 1: Theories of Enquiry and will focus on particular issues relating to the student's project area. As such this unit will further examine the steps involved in generating, analysing, and critically evaluating information, perspectives, theories and sources of data relevant to the student's disciplinary field. Students will broaden their understanding of the ethics of social and scientific research and this knowledge will underpin the design and development of a research proposal as well as the proposal's presentation.

800168.1   Research Fields

Credit Points 10 **Level** 5

Special Requirements

Students must be enrolled in course 8083 Bachelor of Research Studies/Master of Research

....

Each School and Institute within the University has developed a specialist core unit designed to orient students to research in its relevant disciplines. These units interact with the three other core units within the Master of Research: Research Design 1: Theories of Enquiry, Research Literacies and Research Design 2: Practices of Research to provide students with opportunities to develop foundational skills and knowledge in the student's relevant area of research.

400803.2   Research in Nursing Practice

Credit Points 10 **Level** 5

Assumed Knowledge

A basic knowledge of research methods at undergraduate level.

Incompatible Units

400200 - Applied Nursing Research

Special Requirements

Students must be enrolled in the Bachelor of Nursing (Honours).

....

Research is a necessary undertaking toward the continued development of nursing science and practice. The aim of this unit is to both broaden and deepen students' understanding of research methods and to extend their ability to discuss, appraise the work of others and participate in their own research.

800167.1   Research Literacies

Credit Points 10 **Level** 5

Special Requirements

Students must be enrolled in 8083:Bachelor of Research Studies/Master of Research

....

This unit aims to help students become effective communicators in academic and professional settings. It will further develop students' abilities in critical analysis, reading and writing. Upon completion of the unit candidates will have also developed the ability to translate their research knowledge across a variety of settings both within and outside of the University sector.

400864.3   Research Methods (Quantitative and Qualitative)

Credit Points 10 **Level** 2

Prerequisite

400863.2 Foundations of Research and Evidence-Based Practice

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 455

....

This unit further explores research methods used to acquire knowledge in healthcare. This includes research designs, international standards, key statistics, and interpretation of results. The range of health research methods will be presented, and studies about treatment effectiveness (clinical trials and systematic reviews), diagnostic effectiveness and qualitative approaches will be explored in detail. The pathways and resources for conducting beginner research will also be introduced in this unit.

102044.1   Research Methods in Linguistics

Credit Points 10 **Level** 3

Prerequisite

101945.1 Introduction to Linguistics

Special Requirements

Successful completion of 60 credit points including the pre-requisite unit listed above plus 20 credit points from units in the Linguistics major.

....

This unit aims to enable students to acquire the knowledge and skills to design a research project in the field of Languages and Linguistics (i.e., Phonetics, Phonology, Syntax, Semantics and Pragmatics, Sociolinguistics, First or Second Language Acquisition, Bilingualism, Interpreting and Translation, Discourse Analysis). The unit fosters the ability to understand and critically approach previous literature in order to formulate research questions, design a research study, propose appropriate data analysis tools, and generate hypotheses about the results of the study. It includes theoretical and practical research work into Languages and Linguistics.

102375.1   Research Methods in the Creative Arts

Credit Points 20 **Level** 7

Special Requirements

Successful completion of undergraduate degree and formal acceptance into the Master of Arts (Creative Arts).

....

This unit investigates conceptual and theoretical models used in Creative Arts Research. It introduces students to a variety of important methodologies, including empiricism, experimentation, practice-based research, performativity-as-method, and narrative inquiry. It will also focus on writing as a creative praxis that has an important relationship to all the creative arts. Methodologies will be explored through the analysis of various theoretical and conceptual models that are applied in and produced through creative work. The unit will include a variety of strategies for analysing and documenting creative work, including observation, participation, reflection and representation. It will also examine the divisions between theory and practice, asking whether theory is in itself a practice that empiricism describes. It will look at the conditions under which creative arts research is produced, exploring its meanings, effects and affects.

401023.1   Research Principles for Nursing (Advanced)

Credit Points 10 **Level** 2

Assumed Knowledge

Professional communication and the roles and responsibilities of registered nurse or midwife.

Equivalent Units

400824 - Evidence-Based Nursing (Advanced)

Special Requirements

Students must be enrolled in 4693 Bachelor of Nursing (Advanced).

....

This unit introduces Bachelor of Nursing Advanced students to the major paradigms, research principles and concepts that inform critical analysis of literature and the basis of evidence based practice.

401011.1   Research Principles for Nursing and Midwifery

Credit Points 10 **Level** 2

Assumed Knowledge

Professional communication and the roles and responsibilities of registered nurse or midwife.

Equivalent Units

400755 - Evidence-Based Nursing

Special Requirements

Students must be enrolled in 4691 Bachelor of Nursing, 4692 Bachelor of Nursing Graduate Entry or 4864 Bachelor of Midwifery.

....

This unit introduces nursing and midwifery students to the major paradigms, research principles and concepts that inform critical analysis of literature and the basis of evidence based practice.

200412.5   Research Proposal and Seminar

Credit Points 10 **Level** 5

Assumed Knowledge

Students require the basic disciplinary knowledge and skills necessary to design and undertake their honours level research project.

Special Requirements

Students must be enrolled in an Honours Program.

....

The aims of this unit are to identify a suitable honours thesis topic, conduct a preliminary review of the relevant literature, identify research methods applicable to the study, consider any relevant ethical issues applicable to the study, devise a resource management plan and schedule of study, and to seek feedback and input from academics with appropriate skills and experience in the research area. This unit gives honours students access and exposure to research communities via attendance and participation at

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 456

school research seminars. Students will publicly present and defend their thesis proposal to peers and the academic community.

301069.1   Research Stories

Credit Points 10 **Level** 2

Special Requirements

Students must have a minimum GPA of 5 and be enrolled in The Academy at UWS; i.e. students enrolled in the Bachelor of Applied Leadership and Critical Thinking or other advanced courses at the discretion of the Academy or the Dean.

....

This unit is designed for high-achieving students who may be enrolled in Advanced degrees, or the Bachelor of Applied Leadership and Critical Thinking. Narrative inquiry and story-telling is growing in popularity across disciplines as a way of collecting, analysing and presenting complex data. Students will be challenged by the complexity of narrative sense-making and the relationship between personal and cultural narratives (as well as counter-narratives). By following the research journey rather than only the 'outcomes' we can learn from mistakes in the research process and find solutions to real world problems. This unit prepares students with the interdisciplinary research skills needed for the careers of tomorrow.

101962.1   Researching Convergent Media

Credit Points 10 **Level** 7

Equivalent Units

101793 - Methods and Case Studies in Convergent Media

Special Requirements

Students must be enrolled in a postgraduate course.

....

The contemporary media landscape is characterised by the breakdown of traditional media silos and the transformation of media production and consumption practices. Media, marketing and creative professionals are now required to understand and connect with their audiences across multiple media platforms. The aim of this unit is to provide students with an historical, geopolitical and theoretical introduction to convergent media theory and practice/s. Using current media theory, design theories, and research methodologies, students will select, analyse and contextualise case studies. The case studies and topics covered vary from semester to semester and can include iTV, digital games, community media, digital arts, activist networks, social media and cross platform projects.

101906.2   Researching Culture

Credit Points 10 **Level** 2

Prerequisite

100897.2 Everyday Life OR **101979.1** Understanding Visual Culture

Special Requirements

Successful completion of 40 credit points including one of the pre-requisite units shown above.

....

This unit introduces students to the diverse field of cultural research. It outlines and explains the key research methods and methodologies used by cultural researchers. Tutorials and assessment tasks involve 'hands-on' activities designed to familiarise students with the research process and key research practices, including the literature review; research design; observation based research; visual research; memory work; interviews and focus groups; mixed methods; qualitative analysis; and ethical issues. Through completion of this unit, students will gain vocational skills in areas of professional employment like cultural and social research, policy analysis and cultural advocacy. The unit provides essential knowledge and skills for Honours level cultural research.

300810.1   Resource Sustainability

Credit Points 10 **Level** 1

Assumed Knowledge

Understanding of ecological terminology and referencing.

Equivalent Units

300663 - Resource Sustainability, 700099 - Resource Sustainability (UWSC)

Special Requirements

Students require enclosed footwear

....

Resource sustainability deals with the local, national, and global sustainability issues concerning human interactions with the environment. The unit uses current resource issues and scientific concepts to provide the practical and theoretical information needed for students to think critically about environmental issues and to contribute to the sustainable management of natural and built environments. Students will also learn how science and society interact in the management of resources. Using the concept of ecologically sustainable development as a foundation, students will use critical thinking skills to research a resource issue of their choice at the local, national and/or international level. Students will communicate their research using new mediaexploring the issue and make recommendations for improving sustainability.

700099.2   Resource Sustainability (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic biological science and an understanding of referencing

Equivalent Units

300663 - Resource Sustainability, 300810 - Resource Sustainability

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 457

Resource sustainability deals with the local, national, and global sustainability issues concerning human interactions with the environment. The unit uses current resource issues and scientific concepts to provide the practical and theoretical information needed for students to think critically about environmental issues and to contribute to the sustainable management of natural and built environments. Students will also learn how science and society interact in the management of resources. Using the concept of ecologically sustainable development as a foundation, students will use critical thinking skills to research a resource issue of their choice at the local, national and/or international level. Students will communicate their research using new mediaexploring the issue and make recommendations for improving sustainability.

200739.2 Reward and Performance Management

Credit Points 10 **Level** 3

Prerequisite

200300.2 Managing People at Work

Incompatible Units

200611 - Management of Employee Performance, 200612 - Remuneration Theory and Practice

....

'Reward and Performance Management' introduces students to critical perspectives in reward management. Through case studies students consider the wider context in which reward strategies are devised and the strategic decisions that arise if reward is to meet regulatory requirements, organisation objectives and the expectations of the workforce. Students examine the component parts of contemporary reward and critically assess the relationship between performance and reward. Through engagement with different types of performance management systems, students identify and assess contrasting approaches to performance management.

300056.4 Robotics

Credit Points 10 **Level** 4

Prerequisite

300480.2 Dynamics of Mechanical Systems

....

The aim of this unit is to develop an understanding of the basic concepts involved in Robotics. The kinematics, dynamics, control and sensing aspects in robotics will be introduced. In addition, the concepts of artificial intelligence (AI) and their applications in robotics will also be introduced. There will be considerable use of MATLAB in the unit.

300924.1 Science Research Project

Credit Points 10 **Level** 3

Assumed Knowledge

This unit is aimed at undergraduates in their final year of undergraduate study who have a good grounding in the Level 2 units for the discipline area of their individual project.

Equivalent Units

300788 - Science Research Project

Incompatible Units

300645 - Science Research Project 2, 300299 - Chemistry Project 3, J3659 - Biological Science Project 3, 14117 - Chemistry Project, 300542 - Biomolecular Science Project

Special Requirements

Students must have completed at least two Level 3 units and have a GPA of 5.5 or above. This is an undergraduate project unit; the restrictions above are purposely designed to limit enrolments to a small number of high-performing third year students. Handling large enrolments is not possible in this style of unit.

....

Science Research Project is a final-year capstone unit that gives students an introduction to scientific research, while extending their knowledge and practical skills. Each student undertakes a research project supervised by an academic staff member. With the assistance of their supervisor, students will research the literature and define the problem to be studied, carry out a risk assessment, develop the appropriate experimental methods, carry out research on their project, and present a final written report and a poster or oral presentation. This unit offers a challenge to final-year students, and allows innovation by the student with respect to both method and research direction.

300412.3 Science, Technology and Environment Honours Project

Credit Points 60 **Level** 5

Assumed Knowledge

Successful completion of a Bachelors degree in a science discipline. Normally the student will have achieved a grade point average of greater than 5.0 in Level 2 and 3 units.

Special Requirements

Students must be enrolled in a postgraduate or honours course.

....

The aim of this unit is to further develop the student's research and problem solving skills. The student is required to implement a research plan, complete a substantive piece of research in a relevant field within Science, Technology and the Environment and to communicate the results of that work to an interested and technically literate audience. Students will present their research as a thesis with a substantial chapter detailing research objectives, methodology and research outcomes. The thesis topic and structure will vary according to the area of interest of the student and the expertise of the supervisor. The project is meant to be a significant undertaking and to incorporate some element of innovation. Throughout this unit regular planned consultations between the student and supervisor(s) will occur and students will be required to attend seminar series or regular research meetings; these may be formal components of other units within the Bachelor (Honours) course. Students are expected to work to a schedule devised in consultation with their supervisor. The schedule will include dates set for progress reports and the presentation of draft chapters for review by the supervisor.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 458

Western Sydney University

The unit builds upon the skills developed in the undergraduate course, extending students' competencies in a range of practical techniques and processes of critical thinking. Students who successfully complete the Honours program will have achieved the appropriate background to enable them to pursue further postgraduate research and/or coursework in the sciences or pursue a career in industry or profession.

301037.1   Scientific Informatics

Credit Points 10 **Level** 7

Assumed Knowledge

Basic programming knowledge.

Special Requirements

All required equipment will be available through School of Computing, Engineering & Mathematics computer labs

....

This unit aims to provide training for Research Masters in the computational techniques that are integral to much of modern scientific research. The unit includes a number of options of which 6 are to be selected. While these options are expected to be relevant to the student's research field, all of them are designed to provide transferable skills in this topic, and to use a common set of tools, building computing skills for the student's future.

300811.1   Scientific Literacy

Credit Points 10 **Level** 1

Assumed Knowledge

Basic literacy and numeracy.

Equivalent Units

300497 - Professional Skills for Science

....

This unit is designed to provide students with scientific literacy and generic skills required to successfully undertake science-related undergraduate studies. Students learn, develop and utilise academic and interpersonal methodologies within the context of applied scientific principles in society and take responsibility for their own learning. Students are introduced to the contestable and uncertain nature of science and the scientific method. Activities encourage development of self-confidence, self-efficacy, creative thinking through problem solving, group process, communication and peer support. Academic skills include scientific reading and report writing, researching scientific information and library skills, oral presentation, taking tests and exams, effective personal and group based learning strategies, peer assessment, and online learning.

700124.2   Scientific Literacy (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

Basic literacy & numeracy

Equivalent Units

300497 - Professional Skills for Science, 700042 - Professional Skills for Science (UWSC), 300811 - Scientific Literacy

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit.

....

This unit is designed to provide students with scientific literacy and generic skills required to successfully undertake science-related undergraduate studies. Students learn, develop and utilise academic and interpersonal methodologies within the context of applied scientific principles in society and take responsibility for their own learning. Students are introduced to the contestable and uncertain nature of science and the scientific method. Activities encourage development of self-confidence, self-efficacy, creative thinking through problem solving, group process, communication and peer support. Academic skills include scientific reading and report writing, researching scientific information and library skills, oral presentation, taking tests and exams, effective personal and group based learning strategies, peer assessment, and online learning.

101451.2   Second Language Acquisition

Credit Points 10 **Level** 3

Equivalent Units

A1081 - Second Language Acquisition

....

This unit is designed for students who are interested in understanding how a second language is learned. It examines learning in both natural or classroom contexts as well as language development in child and adult learners. Students are introduced to current theories of Second Language Acquisition, as well as current research and its applications to the classroom or the translation process. Students will conduct a small research project to become familiar with the process of learning a second language and some basic research notions and techniques.

200921.1   Security Analysis and Business Valuation

Credit Points 10 **Level** 3

Assumed Knowledge

Knowledge acquired in the corporate financial management and fundamentals of accounting.

Prerequisite

200488.3 Corporate Financial Management

....

This unit analyses companies from a fundamental perspective in order to derive an intrinsic value for securities. The focus is on the attempt by active investors to identify mispriced securities using publicly available information, company reports and financial market information. The analytical techniques of financial statement analysis (e.g. fundamental analysis, free cash flow analysis and pro-forma analysis) and the issue of the "reliability" and "quality" of publicly available information are discussed and explored. Those contemplating careers in investment banking, financial consulting, trust funds,

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 459

superannuation funds, hedge funds, and brokerage firms will find this applied unit both useful and interesting.

200898.1   Seminal Papers in Business

Credit Points 10 **Level** 5

Special Requirements

Students must be enrolled in course 8083 Bachelor of Research Studies/Master of Research.

....

The aim of this unit is to develop skills in applying rigorous analysis and critical assessment to research-debates in business disciplines through an examination of seminal literature in particular business fields which often embrace conflicting theoretical approaches. This will provide candidates with the advanced skills needed to critically analyse debates in a business discipline, while also enabling them to gain more familiarity with theories, issues, and problems in a particular research area. Seminal business papers will be analysed through a balanced and constructive critique of their strengths and weaknesses, providing suggestions for how the work might be extended or improved. From this unit, students will be able to apply the rigorous analytical skills to their own work.

200707.3   Service Industry Studies

Credit Points 10 **Level** 2

Assumed Knowledge

Basic understanding of the service and experience economies is assumed.

Equivalent Units

200581 - Sport Management Research Methods, 200559 - Hospitality Business Research Methods, 200681 - Services Research Methods

....

Service Industry Studies is designed to allow students to develop skills of research planning, execution, interpretation and results dissemination from service industry research projects. Students will learn about and have an opportunity to prepare a literature review, conduct research on a 'problem', collect, analyse and present data on a hypothetical or case based service business issue. Strategies and recommendations in the form of a report will be the outcome of the unit.

101964.1   Sexual/Textual Politics in Victorian Women's Writing

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

The unit will set Victorian women's writing in its intellectual and cultural context, with particular emphasis on the changing roles of women in the nineteenth-century. Using a broad range of texts including 'conduct literature,' journalism, satirical cartoons, polemical literature, art, poetry and novels, this unit will investigate issues such as 'femininity' and female behaviour; educational opportunities

for women, Victorian marriage Reform and the 'separate spheres' rationale, voting reform and women's 'rights', Darwinian Evolutionary Theory, the industrialisation and urbanisation of Britain, and the aims of and discontinuities within the women's 'movement.' We will conclude the unit by considering what impact such texts and campaigns may have had on contemporary society.

101791.2   Short Fiction in the Americas

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit surveys short fiction written in the Americas in English, French, Spanish and Portuguese during the twentieth century. It examines the history of short fictional genres, theories of their functioning, and the ways in which they register and transmit the various national and regional cultures of the Americas. The unit allows students majoring in Spanish to undertake language-specific assessment tasks (reading original texts in Spanish and writing their essay in Spanish) while other students read the texts and complete their assessment tasks in English.

300057.4   Signals and Systems

Credit Points 10 **Level** 2

Prerequisite

200238.2 Mathematics for Engineers 2 AND **300021.2** Electrical Fundamentals

....

This unit aims to develop students' understanding of continuous-time and discrete-time concepts and methods. It covers various signals and their analysis, as encountered in the fields of electrical, computer and telecommunication engineering.

700241.1   Signals and Systems (WSTC AssocD)

Credit Points 10 **Level** 2

Prerequisite

700102.2 Mathematics for Engineers 2 (WSTC AssocD) AND **700104.2** Electrical Fundamentals (WSTC AssocD)

Equivalent Units

300057 - Signals and Systems

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit aims to develop students understanding of continuous-time and discrete-time concepts and methods. It covers various signals and their analysis, as encountered in the fields of electrical, computer and telecommunication engineering.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 460

300996.1 Smart Grids and Distributed Generation

Credit Points 10 **Level** 4

Prerequisite

300771.1 Power Systems

....

This unit is designed to model, analyse and control of newly developing areas of distributed generation and smart grids. The unit will cover modelling, control, simulation and protection of such systems. The unit will cover the impacts of renewable sources and power electronics on the operation of smart grids and micro-grids. The unit will also cover environmental and economic impacts of such systems.

63178.2 Social and Political Developments in Contemporary China

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit is concerned with developments in China since the establishment of the People's Republic in 1949. It will focus on the post-1976 period, which saw the adoption and implementation of an "open-door" policy and the launch of the "Four Modernisations". Due attention, however, will also be paid to the history and politics of the 1950s and 1960s as backgrounds. The unit will be issue-oriented, exploring a whole range of social and political issues that will have a bearing on China's future as a potential world power in the twenty-first century.

300961.1 Social Computing

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 160 credit points.

....

In Social Computing we study the interplay between online computational systems and social behaviour. Rapid growth of computational devices connected to the internet such as mobile phones, tablets, personal computers have made Social Computing an important area of study as now billions of people can exchange information using these devices. This large flow of information is impacting the social behaviour. For example applications such as Wikis and Blogs have changed passive information consumers into both information producers and consumers called prosumers. Social networking applications such as Facebook, YouTube have changed the way we share social information and organise social activities. Online markets have changed the buying patterns of people and forced organisations to think of new products, services and marketing strategies. In this unit you will learn the fundamental concepts of Social Computing, how Social Computing is evolving, explore interaction models of social networks, analyse few reported cases that relates to social computing in detail to understand the impact on the society and businesses, and explore future possibilities. This unit will also cover underpinning technologies related to social computing such as Web 2.0, knowledge management and related security and privacy issues.

300961.2 Social Computing

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 140 credit points.

....

In Social Computing we study the interplay between online computational systems and social behaviour. Rapid growth of computational devices connected to the internet such as mobile phones, tablets, personal computers have made Social Computing an important area of study as now billions of people can exchange information using these devices. This large flow of information is impacting the social behaviour. For example applications such as Wikis and Blogs have changed passive information consumers into both information producers and consumers called prosumers. Social networking applications such as Facebook, YouTube have changed the way we share social information and organise social activities. Online markets have changed the buying patterns of people and forced organisations to think of new products, services and marketing strategies. In this unit you will learn the fundamental concepts of Social Computing, how Social Computing is evolving, explore interaction models of social networks, analyse few reported cases that relates to social computing in detail to understand the impact on the society and businesses, and explore future possibilities. This unit will also cover underpinning technologies related to social computing such as Web 2.0, knowledge management and related security and privacy issues.

102152.1 Social Ecology

Credit Points 10 **Level** 7

Equivalent Units

101654 - Researching Social Ecology

....

This unit focuses on learning in the context of social-ecological understanding. It asserts that ecological sustainability is a consequence of the understanding and enactment of social-ecological relationships. In this regard 'social ecology' describes a field of understanding while 'sustainability' describes praxis in a social-ecological context. Both experience and the understanding of experience – learning- are subject matter. This study is undertaken through reference to ecological systems of understandings in the context of challenges to that understanding. It is grounded in reference to learning, change, creativity, culture, politics and the physical environment. The unit introduces key theorists and invites students to examine their personal relationship to social-ecological learning.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 461

Units

300958.2   Social Web Analytics

Credit Points 10 **Level** 3

Assumed Knowledge

Students are expected to be familiar with fundamental computer programming concepts.

Special Requirements

Co-requisite Unit: 301108 Thinking About Data for students enrolled in 3734 Bachelor of Data Science. Pre-requisite Unit: 300700 Statistical Decision Making or 200263 Biometry or 200032 Statistics for Business for students not enrolled in 3734 Bachelor of Data Science.

....

The Social Web provides everyone with a voice, information from Facebook, Twitter and Google+ should allow us to identify trends and relationships in society. Whilst this has interest on a personal level, the killer-apps will be in analyzing such data for business; tracking the buzz around a new product, understanding the links between customers etc. This unit will introduce its students to the Social Web data that is available, and blend computational, mathematical and statistical concepts to allow extraction and analysis of such data.

101450.2   Sociolinguistics

Credit Points 10 **Level** 3

Equivalent Units

A1080 - Sociolinguistics

....

This unit is designed to develop students' interest in language and society and give them an understanding and appreciation of variation in language (accents, dialects) and language change, language planning, as well as the interdependent relationship between language learning, communicative competence and cultural practices, both in the Australian context and also in a more global context. It also aims to show students how this unit fits in with other language and linguistics-related disciplines, e.g. Linguistics, Bilingualism and Biculturalism, Second Language Acquisition.

101359.5   Sociology of Religion

Credit Points 10 **Level** 3

Equivalent Units

Unit B3967 - Sociology of Religion

Special Requirements

Successful completion of 40 credit points of study OR 101336 - Introduction to Sociology OR 101551 - Understanding Society OR 100960 - Contemporary Society.

....

In this unit some of the main sociological approaches to the study of religion will be considered. The unit will be orientated particularly to the tension between religion and social theory in the evolution of sociological thought. It addresses the impact of religion and religious bodies on Australian society and politics. The unit will focus on the relation of theory and practice, on the research of

contemporary religious practice, and on the contemporary relevance of major theorists in the sociology of religion. It will address issues such as Buddhism, Fundamentalism(s), gender in religion, globalisation, Islam, modernity/post modernity, neo-paganism, networks in spiritualities, New Age, popular culture, and new religious movements.

300985.1   Soil Mechanics

Credit Points 10 **Level** 2

Prerequisite

200237.4 Mathematics for Engineers 1

Equivalent Units

300731 - Soil Engineering

....

This unit is an introductory unit covering the use of soil, and the water in it, as an engineering material. It will provide students with a basic understanding of the physical and mechanical properties of soils, simple soil testing methods to characterise soil strength and deformation behaviour and how to apply basic techniques to assess the hydro-mechanical response of soils subjected to loading.

700245.1   Soil Mechanics (WSTC AssocD)

Credit Points 10 **Level** 2

Prerequisite

700101.1 Mathematics for Engineers 1 (UWSC Assoc Deg)

Equivalent Units

300731 - Soil Engineering; 300985 - Soil Mechanics

Special Requirements

Students must be enrolled in 7022 Associate Degree in Engineering

....

This unit is an introductory unit covering the use of soil, and the water in it, as an engineering material. It will provide students with a basic understanding of the physical and mechanical properties of soils, simple soil testing methods to characterise soil strength and deformation behaviour and how to apply basic techniques to assess the hydro-mechanical response of soils subjected to loading.

300823.1   Soils

Credit Points 10 **Level** 1

Equivalent Units

300625 - Noise Assessment, 300362 - Environment and Health

....

This unit provides students with a basic understanding of soil formation and erosion processes, soil physical, chemical and biological properties, and the diversity and classification of soils in the Australian landscape. These basic principles are explored in relation to the sustainable management of soils for horticultural and agricultural production and for environmental management, other land uses and in relation to forensic investigation and studies. The practical sessions are designed to reinforce the lecture material and include field description and analysis of soil

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 462

profiles and properties, soil sampling principles and practice, laboratory measurement of soil physical and chemical properties essential/important for plant growth, soil biology and human and animal remains.

102295.1 Space, Place and the Field

Credit Points 10 **Level** 7

Assumed Knowledge

Undergraduate degree in the Social Sciences or equivalent.

Special Requirements

Students must be enrolled in a postgraduate course.

....

This unit explores the relevance and application of the 'spatial turn' across social sciences and humanities disciplines. It examines various ways of thinking spatially, theorizing processes that shape urban space, and researching in place. Through concrete engagements with Sydney as a living laboratory it explores how the spatial turn adds to and counters dominant ways of thinking that privilege temporality or deep structure. Space, Place and the Field is analysed at varying scales, including from bodies to species, streets to cities, interpersonal to macro politics, drawing on the wealth of social, cultural, economic and environmental studies of Sydney.

100201.2 Special Study in Languages and Linguistics

Credit Points 10 **Level** 3

Equivalent Units

A3470 - Special Study in Languages and Linguistics 1

....

This Level 3 Languages and Linguistics unit is, primarily, a self-study unit designed to cater for a special area of interest in languages and linguistics not otherwise covered in the units on offer in the languages program or in the BA (Interpreting and Translation) and/or where the student may otherwise find it difficult to complete his or her program of study. Once the topic chosen by the student is approved by the Unit Coordinator a supervisor is nominated and an individually-tailored learning contract, including appropriate language-specific and/or linguistics readings and tasks, is drawn up in collaboration with the supervisor and is submitted to the Unit Coordinator for approval. This approval process should happen, ideally, at least one week prior to the beginning of the teaching semester.

301089.1 Special Technical Project

Credit Points 10 **Level** 3

Assumed Knowledge

Students are expected to have been involved in the project in their 2nd year of study on a voluntary basis.

Special Requirements

Students need to see approval from the Unit Coordinator. Students must have completed 140 credit points or more prior to enrolment and must be enrolled in one of the following courses to enrol in this unit: 3689 Bachelor of Engineering; 3740 Bachelor of Engineering (Honours); 3690 Bachelor of Engineering Advanced (Honours); 3691

Bachelor of Engineering Science; 3727 Bachelor of Building Design Management; 2607 Bachelor of Construction Management; 3692 Bachelor of Construction Technology; 3729 Bachelor of Design and Technology; 3730 Bachelor of Industrial Design; 3731 Bachelor of Industrial Design (Honours).

....

This is an elective unit offered to students who are engaged in a School approved project. The unit can be taken during the third year of Engineering, Construction Management and Industrial Design courses. This unit consolidates and deepens a students knowledge and capabilities developed through previous years of study. Students will develop complex solutions by collaborating with various discipline specialists. This unit develops management, reflective and leadership skills including the ability to work with team members from other fields of study through practical application.

100505.2 Special Topics in English, Text and Writing

Credit Points 10 **Level** 2

Equivalent Units

63258 - Special Topics in Text and Writing

Special Requirements

Successful completion of 60 credit points.

....

This is a "shell" unit, in which new unit content and critical approaches in English, Text & Writing can be trialled. Content will depend on student requirements in conjunction with staff research and teaching interests. The unit might also be used to provide students with the opportunity to undertake primary research or a project in the area of English, Text & Writing.

301002.1 Specialised Software Applications

Credit Points 10 **Level** 7

Equivalent Units

300513 - Engineering Software Applications

Special Requirements

Students must be enrolled in a postgraduate course

....

This unit offers several streams of practical applications in engineering and industrial design software. Students get to choose a software application stream depending on their key program. Lectures and assignments are delivered online and are enhanced by face to face contact with stream coordinators. Emphasis is placed on teaching students practical software applications skills relevant to industry needs.

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 463

Western Sydney University

401099.1 Specialities in Traditional Chinese Medicine 1

Credit Points 10 **Level** 4

Assumed Knowledge

It is assumed the students will have a thorough knowledge of TCM theory, acupuncture and Chinese herbal medicine as a foundation for this unit.

Incompatible Units

400919 - Specialties in Traditional Chinese Medicine Practice 1 (PG); 400358 - Specialties in Traditional Chinese Medicine 1

Special Requirements

Students must be enrolled in 4710 - Bachelor of Traditional Chinese Medicine

....

This unit provides learning experiences that enable the health professional to analyse, diagnose and treat common gynaecological diseases and musculoskeletal conditions using a Traditional Chinese Medicine (TCM) approach with acupuncture and Chinese herbal medicine. Students will develop a good understanding of the causes and pathophysiological mechanisms of common gynaecological diseases and musculoskeletal conditions.

401103.1 Specialities in Traditional Chinese Medicine 2

Credit Points 10 **Level** 4

Incompatible Units

400923 - Specialties in Traditional Chinese Medicine 2 (PG); 400364 - Specialties in Traditional Chinese Medicine 2

Special Requirements

Students must be enrolled in course 4710 - Bachelor of Traditional Chinese Medicine

....

The specialties of paediatrics, dermatology, ear, nose, throat (ENT) and eye diseases, are important divisions of Traditional Chinese Medicine (TCM) activity. This unit enables students to develop an understanding of the aetiology and pathophysiology of common paediatric, dermatological, ENT and eye disorders, and to analyse, diagnose and treat these conditions using acupuncture and Chinese herbal medicine.

401055.1 Sport and Exercise Psychology

Credit Points 10 **Level** 3

Prerequisite

101614.2 Psychology and Health AND **400880.2** Fundamentals of Exercise Science

Equivalent Units

101615 - Sport and Exercise Psychology

Incompatible Units

100678 - Introduction to Sport Psychology, 100680 - Exercise Psychology, 400322 - Sociological Aspects

Special Requirements

Students must be enrolled in course 4659 - Bachelor of Health Science (PDHPE) or 4658 - Bachelor of Health Science - Sport and Exercise Science.

....

Sport and Exercise Psychology is a topic of particular relevance to those working in the sport, health and fitness, and performance industry. The field of Sport and Exercise Psychology is primarily concerned with the study of the psychosocial factors which influence participation and performance in physical activity and sport, as well as the psychological impact that these activities has on participants. This unit examines pertinent theory, research, and application in the field of Sport and Exercise Psychology.

200742.2 Sport and Hospitality Event Management

Credit Points 10 **Level** 3

Assumed Knowledge

This is an advanced unit which assumes basic knowledge of sport/hospitality management.

Incompatible Units

200579 - Sport Event and Facility Management; 200682 - Convention and Special Event Management

....

An essential part of many sport and hospitality businesses involves the organisation and management of special events and the facilities which host them. Sport and Hospitality Event Management provides knowledge and understanding by giving students the opportunity to practically apply skills and knowledge through development and execution of their own special event. The unit calls for students to apply previously learned management strategies, leadership theories, communication skills, and staff management to facilitate their event projects.

200751.2 Sport Management Applied Project

Credit Points 10 **Level** 3

Assumed Knowledge

An introductory level of knowledge in sport management.

Prerequisite

200707.2 Service Industry Studies

Equivalent Units

200580 - Sport Management Applied Project

Incompatible Units

200561 - Hospitality Management Applied Project

Special Requirements

Some placement agencies require completion of a Prohibited Persons Declaration; Criminal Record Check Clearance and Immunisation.

....

This unit provides students a unique opportunity to integrate knowledge gained from operational and theoretical perspectives of sport studies into application in

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 464

an engaged research project in sport management. Students will engage in comprehensive projects which bring together real world industry problems and sport theory. Students studying Sport Management Applied Project may have the opportunity to undertake an international field trip to experience the sport environment from an international perspective.

200664.2 Sport Management Internship

Credit Points 10 **Level** 3

Assumed Knowledge

An introductory level of knowledge in Sport Management.

Equivalent Units

400649 - Professional Practice in Sport Management 3, 400648 - Professional Practice in Sport Management 2, 200576 - Professional Practice in Sport Management

Special Requirements

Some placement agencies require completion of a Prohibited Persons Declaration; Criminal Record Check Clearance and Immunisation. Students must be enrolled in 2753 Bachelor of Business and Commerce, 2754 Bachelor of Business and Commerce (Advanced Business Leadership), 3655 Bachelor of Information and Communications Technology/Bachelor of Business and Commerce, 3659 Bachelor of Science/Bachelor of Business and Commerce, 2740 Bachelor of Business and Commerce/Bachelor of Laws, 1688 Bachelor of International Studies/Bachelor of Business and Commerce, 1695 Bachelor of Arts/Bachelor of Business and Commerce and 1785 Bachelor of Communication/Bachelor of Business and Commerce.

....

Sport Management Internship provides students with an opportunity to engage with the sport industry through a 120 hour industry placement. This unit provides the opportunity to observe practitioners in action and to learn in a practical "hands-on" setting. Experience in the field of study is an essential ingredient in preparing an individual for employment either during the period of study or after graduation. Students have the opportunity to see how knowledge and skills acquired in lectures and tutorials/laboratories can be applied and also relate theoretical concepts and skills to situations in sport or exercise-related settings.

200754.2 Sports Management - Planning and Development

Credit Points 10 **Level** 3

Assumed Knowledge

An introductory level of knowledge in sport management.

Equivalent Units

200244 - Sports Management - Planning and Development

....

With sport professionalism, globalisation, population change and consumer pressure there is a need for government, not for profit and private enterprise to better plan for and provide sport and leisure facilities and services. Sport Management - Planning and Development provides an in-depth study of the planning and

development of sport in the Australian context. Throughout this unit there is a focus on managing change to appropriately planning for future sport and leisure needs within a context of public policy. An introductory framework will be provided emphasizing the historical perspectives of sport and leisure and its history and role within contemporary Australian society.

300700.5 Statistical Decision Making

Credit Points 10 **Level** 1

Equivalent Units

200192 - Statistics for Science, 200263 - Biometry, 200032 - Statistics for Business, 200052 - Introduction to Economic Methods, 700033 - Biometry (UWSC), 700041 - Statistical Decision Making (UWSC)

Incompatible Units

200182 - Quantitative Techniques

....

Statistical Decision Making introduces students to various statistical techniques supporting the study of computing and science. Presentation of the content will emphasize the correct principles and procedures for collecting and analysing scientific data, using information and communication technologies. Topics include describing different sets of data, probability distributions, statistical inference, and simple linear regression and correlation.

300991.1 Statistical Hydrology

Credit Points 10 **Level** 3

Prerequisite

300983.1 Surface Water Hydrology

....

This unit covers the principles of statistical hydrology. It explores at-site flood frequency analysis, regional flood frequency analysis, trend analysis of hydrological data, linear regression analysis and multivariate statistical techniques to solve hydrological problems.

700045.3 Statistics for Academic Purposes (WSTC Prep)

Credit Points 5 **Level** Z

Assumed Knowledge

Year 10 Mathematics or equivalent

Equivalent Units

700014 - Statistics for Academic Purposes (UWSCDip); 900011 - Statistics for Academic Purposes (UWSC)

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

Statistics for Academic Purposes is designed and written to prepare students for study in Statistics at first year university level. The unit develops those skills peculiar to the statistical requirements of further study in the areas of Arts, Business, Science and the Humanities.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 465

Units

200032.5 Statistics for Business

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics/Mathematics Extension 1 is desirable.

Equivalent Units

200192 - Statistics for Science, 300700 - Statistical Decision Making, 200263 - Biometry, 200052 - Introduction to Economic Methods, 700007 - Statistics for Business (UWSC), 700041 - Statistical Decision Making (UWSC)

Incompatible Units

200182 - Quantitative Techniques

....

Statistics for Business introduces the basic concepts and techniques of statistics that are particularly relevant to problem solving in business. It also provides a sound base for more advanced study in statistics and forecasting in subsequent sessions. Topics include: presentation of data; descriptive statistics; the role of uncertainty in business decision making; hypothesis testing; and basic forecasting.

700007.5 Statistics for Business (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

Mathematics, equivalent to the Mathematics subject in the NSW HSC

Equivalent Units

200032 - Statistics for Business

Incompatible Units

200192 - Statistics for Science, 200052 - Introduction to Economic Methods, 200182 - Quantitative Techniques, 200263 - Biometry

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisite: Students enrolled in 7005 Diploma in Information and Communications Technology, 7007 Diploma in Business and Commerce, 7040 Bachelor of Business and Commerce (UWSC First Year Program), 7041 Bachelor of Information and Communications Technology (WSTC First Year Program), 7059 Diploma in Business and Commerce Extended, 7063 Diploma in Business and Commerce, 7064 Bachelor of Business and Commerce (UWSC First Year Program), 7071 Bachelor of Business and Commerce Extended (UWSC First Year Program), 7098 Diploma in Business, 7099 Bachelor of Business (WSTC First Year Program), 7102 Diploma in Business Extended or 7103 Bachelor of Business Extended (WSTC First Year Program) must pass 700045 Statistics for Academic Purposes (WSTC Prep) before enrolling in this unit.

....

This unit introduces the basic concepts and techniques of statistics that are particularly relevant to problem solving in business. It also provides a sound base for more advanced

study in statistics and forecasting in subsequent sessions. Topics include: presentation of data; descriptive statistics; the role of uncertainty in business decision making; hypothesis testing.

300730.2 Steel Structures

Credit Points 10 **Level** 3

Prerequisite

300733.2 Introduction to Structural Engineering

Corequisite

300732.2 Structural Analysis

Equivalent Units

85014 - Steel Structures

....

This unit covers the basic behaviour of steel members and structures, the appropriate methods to analyse them and the design criteria and methods used to proportion them.

200665.2 Strategic Communication in Sport

Credit Points 10 **Level** 2

Equivalent Units

400321 - Sport Management 2, 200556 - Communication in Sport

....

Strategic Communication in Sport offers students the opportunity to explore the management of the different types of communication available to sporting organisations. With the high profile of many sporting organisations, communication plays a key part of organisational strategy. Maximising communication through an understanding of the interconnect media relationships and the role of communication within these relationships is explored.

200587.2 Strategic Management

Credit Points 10 **Level** 3

Prerequisite

200571.2 Management Dynamics OR **MG102A.3** Management Foundations

Equivalent Units

MG302A - Strategic Management

....

This unit explores the nature and essence of strategy and how this is created in various organisational, industry and economic contexts. The complexity of the strategy process, content and context means that there is not one clear position on strategy. The impact of this complexity on managers seeking to develop a strategic thinking capability is examined. The paradoxes and debates in the field of strategy are explored in an effort to understand the concept of sustainable competitive advantage. Students will utilise the theoretical knowledge presented in a dialectical enquiry framework to undertake strategic analysis, and develop a selection of strategic options, for case study scenarios and in a team strategy simulation.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 466

200087.3   Strategic Marketing Management

Credit Points 10 **Level** 3

Assumed Knowledge

This is a capstone unit in marketing. It is assumed that students have knowledge of basic marketing concepts, theories, and frameworks in consumer behaviour, marketing communications and marketing research.

Prerequisite

200083.2 Marketing Principles

....

This unit explores important strategic marketing theories, concepts and practice which are integral to business success. Marketing strategy is central to corporate and small business planning and therefore strategic marketing decisions contribute significant value to the determination of business scope, partnerships, product innovation and resource allocation. This includes defining appropriate customer focus, product positioning, distribution and pricing strategies. This unit is designed to enable students to make strategic marketing management decisions that add value for businesses in both the corporate and small business sectors.

401148.1   Strength and Conditioning

Credit Points 10 **Level** 3

Prerequisite

401140.1 Biomechanics AND **401142.1** Exercise Physiology AND **401150.1** Exercise Testing and Measurement

Equivalent Units

400890 - Resistance Training and Physiology

Special Requirements

Must be enrolled in 4658 - Bachelor of Health Science (Sport and Exercise Science).

....

Strength and Conditioning presents the growing body of research evidence supporting specific methods of resistance exercise and training, as well as the role of resistance exercise in disease prevention and health promotion. Students gain an understanding of the energetics and physiology of resistance exercise by also completing and experiencing laboratories focussed on the important applied concepts in resistance exercise and training.

300732.2   Structural Analysis

Credit Points 10 **Level** 3

Prerequisite

300733.2 Introduction to Structural Engineering

Equivalent Units

85010 - Structural Analysis

....

This unit introduces students to the aspects of structural analysis of trusses, beams and frames. It covers the first-order elastic analysis of statically determinate and indeterminate structures. This course aims to teach students to master basic skills in structural analysis as well as skills in using computer software to analyse complex structures.

101948.2   Structure of Language

Credit Points 10 **Level** 2

Assumed Knowledge

Basic knowledge of linguistics, phonetics and phonology

Equivalent Units

101455 - The Structure of English

Special Requirements

Successful completion of 40 credit points.

....

This unit aims to equip students with knowledge about the structural aspects of language. Students will learn to describe, analyse and reflect on the structure and meaning of linguistic elements from word to sentence level. Using examples from different languages, including Australian Indigenous languages and other languages spoken in Australia, this unit will provide students with an understanding of how structure and meaning are connected, how they link up with other areas of linguistics, and how research in this field is relevant to the linguistic ecology of Australia.

101869.1   Studies in Postcolonial Literature

Credit Points 10 **Level** 2

Assumed Knowledge

An idea of the genre of the English novel and a history of imperialismn.

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit focuses on Postcolonial Studies, which has been one of the most important literary and theoretical movements that makes meaning of colonial discourse theory and offers a stringent critique of it at the same time. The field offers ways of understanding literature, culture and society in modern postcolonial nations in Asia and Africa after the collapse of colonial rule. Simultaneously it also affords a re-visioning of the central tenets of Eurocentric thinking that were used to colonise third world nations and thus is a vital mode and methodology for understanding contemporary society. This particular unit will look at models and examples of African postcolonialism from early to late 20th century.

102187.1   Sultans, Colonists and Nationalists: Indonesia C1200-1942

Credit Points 10 **Level** 3

Incompatible Units

101972 - The History of Modern Indonesia

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 467

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines the historical background of Indonesia's struggle to attain independent nationhood. Emphasis will be placed on social, cultural and political factors that shaped Indonesia prior to 1942, encompassing the classical period of the Hindu-Buddhist kingdoms, the rise of the early modern Islamic sultanates, the first encounters between Europeans and the peoples of the 'Malay world', the emergence of the Dutch East India Company (VOC) as a dominant force in the region, the subsequent imposition of the Dutch colonial rule, and, most significantly, the development of modern Indonesian nationalism.

300983.1 Surface Water Hydrology

Credit Points 10 **Level** 4

Assumed Knowledge

a) solution to elliptical, parabolic and hyperbolic partial differential equations b) finding roots of an equation

Prerequisite

300765.2 Hydraulics

Equivalent Units

300766 - Hydrology

....

Surface water hydrology covers the principles of hydrology as it pertains to surface water component of the hydrologic cycle. The principal focus is on the relationship between rainfall and surface runoff. The extent of flooding resulting from storm events will be evaluated through floodplain delineation process. Successful completion of this unit provides the competencies required to propose sustainable engineering solutions to potential adverse impacts of land-use changes. This unit builds on the hydraulic concepts acquired from the lower level fluids units.

300738.3 Surveying for Engineers

Credit Points 10 **Level** 1

Assumed Knowledge

Students need a good knowledgeof Geometry and Trigonometry.

Prerequisite

200237.3 Mathematics for Engineers 1

Equivalent Units

85003 - Surveying for Engineering

....

This core unit provides students with a basic knowledge of Surveying as it relates to various Engineering projects. It provides material for units such as Water Engineering, Environmental Engineering, Infrastructure Engineering and Engineering Project.

300798.1 Sustainability and Risk Engineering

Credit Points 10 **Level** 4

Special Requirements

Successful completion of 200 credit points.

....

Analysis of sustainability with engineering perspective is increasingly becoming important in the modern world. Also, in the future sustainability will include risk engineering. Hence, engineers with in-depth understanding of different tools that can be used for both sustainability and risk analysis will have significant edge in their future career. The main objective of this unit is to introduce different tools available for sustainability and risk analysis in various engineering applications. The content includes renewable/alternative energy systems, energy/resource efficiency, sustainable/green buildings, sustainable transport and infrastructure, sustainable water management, environmental management systems, sustainability reporting, life cycle analysis, probability/reliability theory, risk assessment models, overall system analysis.

301095.1 Sustainable Design 1: Materials and Technology

Credit Points 10 **Level** 1

Equivalent Units

300304 - Sustainable Design: Materials Technology

Special Requirements

Students are required to purchase casting material and supplies under the value of $100. Online work safety module must have been completed prior to workshop space use. Specific requirements regarding machine use may require student safety inductions per apparatus i.e. drill, sander.

....

In this unit we explore materials from a design perspective - their properties, qualities, typical applications, their cost and the environmental impact associated with their extraction, use and disposal. We also look at how they can be formed using contemporary and emerging processing techniques - from sand casting to rapid prototyping. Lectures are supplemented with live demonstrations of materials processing techniques. Students undertake a life cycle materials research project and a design for manufacture (DFM) project.

301081.2 Sustainable Design 2: Product Service Systems

Credit Points 10 **Level** 2

Prerequisite

301095.1 Sustainable Design 1: Materials and Technology OR **300965.1** Engineering Materials

Equivalent Units

300306 - Sustainable Design: Sustainable Futures

....

This unit builds students' capacity for systems thinking in the context of designing new products and services.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 468

Western Sydney University

Students will explore contested and emerging sustainability issues, gather evidence of opportunities for change, and then scope out plans for implementing new product service systems. Students will conduct this by researching and modelling some of the current challenges facing socio-ethical, economic and environmental domains. Designers must now go beyond current uses of technology to visualise and plan scenarios of how the world could be. This entails engaging with complex ecological equilibria, and developing system solutions that are acceptable socially and attractive culturally.

300998.1 Sustainable Energy Systems

Credit Points 10 **Level** 4

Assumed Knowledge

Basic understanding of the principles and engineering applications of physics in energy systems.

....

This unit prepares engineering students to work in the area of renewable energy systems and to be knowledgeable and be in a position to appraise environmental, social, legal, economic and political issues concerned with renewable energy systems.

300791.1 Sustainable Food Production

Credit Points 10 **Level** 2

Incompatible Units

300530 - Advances in Agonomy

....

Sustainable Food Production provides students with the knowledge and skills required to analyse current and future food production systems with an emphasis on water and energy efficiency. The subject material integrates agronomic principles with food supply chain analysis. This approach facilitates an analytical framework that goes beyond farm-gate productivity by including aspects of the food supply chain. Key concepts include water use efficiency, nitrogen balance, energy balance, life cycle assessment, and greenhouse gas emissions. Case studies will be drawn from a range of food production systems, emphasising productivity per unit of input.

101569.2 Sustainable Futures

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 80 credit points.

....

In this unit we will explore the questions 'can we create a sustainable society? If so what would it look like and how could it be done; is it possible to live ethically with each other and the planet?' While major contemporary theoretical concepts will be explored the emphasis is on developing sustainable alternatives to the way we now live both locally and globally. Particular attention will be paid to thinking ecologically, postcolonial development and issues of race, gender.

301003.1 Sustainable Systems

Credit Points 10 **Level** 7

Special Requirements

Students must be enrolled in a postgraduate course

....

This unit seeks to teach the essential tools available to achieve environmental sustainability in various engineering, construction, industrial design professional settings. The unit will particularly focus on the application of the tools and exploration of Australian regulatory and sustainable development practices.

300165.3 Systems Administration Programming

Credit Points 10 **Level** 3

Assumed Knowledge

A good understanding of programming concepts, such as selection, iteration, modularization, and one dimensional arrays. Basic knowledge of Windows operation system.

Prerequisite

300167.3 Systems Programming 1

Incompatible Units

300577 - Script programming

....

This unit covers programming techniques and tools used to administer standalone and networked computer systems. The unit focuses on the use of high level interpretive scripting languages to automate everyday administrative tasks, and to monitor and control running systems. Techniques to extend scripting language capabilities by dynamic linking to compiled code are examined, particularly in terms of access to operating system level functions. The unit also examines the use of administrative programs and tools to monitor and adjust system performance and capacity.

300585.2 Systems Analysis and Design

Credit Points 10 **Level** 1

Assumed Knowledge

Students should have knowledge of the fundamentals of information systems, computer systems, computer applications and information processing

Equivalent Units

300131 Introduction to Analysis and Design; 700013 Systems Analysis and Design (UWSC)

....

This unit introduces the concepts of System Analysis and Design. The study of methodologies and techniques for problem recognition, requirement analysis, process modelling and/or data modelling are essential elements of this unit. The Systems Development Life Cycle model is employed as the prime approach to teach the unit, providing students with the basic skills required for analysis and design of logical solutions to information systems

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 469

problems. The use of Computer Aided System Engineering tools will be discussed in practical sessions.

700013.2 Systems Analysis and Design (WSTC)

Credit Points 10 **Level** 1

Assumed Knowledge

Students should have knowledge of the fundamentals of information systems, computer systems, computer applications and information processing

Equivalent Units

300131 - Introduction to Analysis and Design, 300585 - System Analysis and Design

Special Requirements

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory units listed in the course structure prior to enrolling in this University level unit. Pre-requisites: Students enrolled in 7067 Diploma in Information and Communications Technology Extended or 7083 Bachelor of Information and Communications Technology Extended (WSTC FYP) must pass 700199 Academic Communication 2 (WSTC prep) or 700208 English for Tertiary Study 2 (WSTC Prep) or 700210 Introduction to Academic Communication 2 (WSTC Prep) and must pass 700201 Computer Studies (WSTC Prep) and must pass 700047 Programming Design (WSTC Prep) before enrolling in this unit. Co-requisites: Students enrolled in 7005 Diploma in Information and Communications Technology or 7041 Bachelor of Information and Communications Technology (WSTC FYP) must enrol concurrently in unit 700047 Programming Design (WSTC Prep).

....

This unit introduces the concepts of System Analysis and Design. The study of methodologies and techniques for problem recognition, requirement analysis, process modelling and/or data modelling are essential elements of this unit. The Systems Development Life Cycle model is employed as the prime approach to teach the unit, providing students with the basic skills required for analysis and design of logical solutions to information systems problems. The use of Computer Aided System Engineering tools will be discussed in practical sessions.

300166.2 Systems and Network Management

Credit Points 10 **Level** 3

Assumed Knowledge

Students should be familiar with the fundamentals of computer networking and data communications. In particular, they should have a good understanding of the TCP/IP protocol suite, the OSI model, and current networking and internetworking technologies.

Prerequisite

300095.3 Computer Networks and Internets

....

With the explosive growth of the Internet to connect almost all digital devices such as computers, smartphones and TVs, the Internet has become a huge infrastructure in

which various kinds of systems are running to deliver a plethora of network services. To ensure the efficient utilization of network resources (e.g., bandwidth) and the convenient access to network services, networks and systems must be managed in a proper way. Facing this demand, this unit covers the standards, protocols and skills pertinent to the management of networks and systems. In particular, this unit introduces Software Defined Networking (SDN), a new paradigm for conducting network management with programmability, flexibility and scalability.

300167.3 Systems Programming 1

Credit Points 10 **Level** 2

Assumed Knowledge

This unit requires a knowledge base of at least the level of a completed first year in a professional Computing degree. Ability to apply fundamental concepts in data structures, algorithms, programming principles will be assumed.

Prerequisite

300580.2 Programming Fundamentals OR **300018.2** Digital Systems 1 AND **300027.2** Engineering Computing

Special Requirements

Students in 3621 Bachelor of Engineering must be enrolled in one of the Key Programs attached to the course.

....

This unit provides an introduction to the knowledge and skills required for the design, writing and support of technical software and other such functions normally falling within the role of the systems programmer. It provides for detailed study of a systems programming environment and its application to systems programming tasks.

101832.2 Talking Normal: Sociolinguistics and Modern Literature

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit studies the ways in which speech disorders like stuttering and mutism, along with other 'non-standard' forms of language (dialects, accents, slang, etc.) have been portrayed and oftentimes stigmatized in twentieth-century literary and visual culture. Students will engage with a range of genres and texts, all of which deal with the question of how we are defined based on the way we speak. Readings may include one or more national literatures such as American, British, European, and Australian literature.

301088.1 Tangible Interaction Design

Credit Points 10 **Level** 2

Prerequisite

300570.3 Human-Computer Interaction

Special Requirements

Online work safety module must have been completed prior to workshop space use. Specific requirements regarding

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 470

machine use may require student safety inductions per apparatus i.e. drill, sander.

....

This unit will provide students with the capacity to create interactive products that can sense environmental stimuli and exhibit an appropriate yet intelligent response. Students will be expected to write script based programs to control hardware circuits connecting various Input/Output peripherals (sensors, actuators). The range of interactive products studied and built by the students will be diverse; ranging from household everyday products to artifacts that can be used in public spaces.

200187.3   Taxation Law

Credit Points 10 **Level** 3

Prerequisite

200183.4 Law of Business Organisations

Equivalent Units

61523 - Taxation Law and Practice, AC302A - Taxation (V1), F3002 - Taxation Law

Incompatible Units

200019 - Revenue Law

Special Requirements

Students enrolled in 2502 Bachelor of Laws (Non graduate entry) must obtain permission to enrol in this unit.

....

This unit version replaces 200187.1 Taxation Law from Autumn 2011. Topics in this unit include: constitutional basis of taxation; income tax assessment; concept of income tax; allowable deductions; other federal and state taxes; taxation of business associations (partnerships, companies, trusts and primary producers); taxation accounting, administration and practice; taxation planning and avoidance.

300976.1   Technologies for Mobile Applications

Credit Points 10 **Level** 2

Prerequisite

300580.2 Programming Fundamentals

....

This unit introduces students to the technologies used to develop and deploy mobile applications. The unit covers evaluating organisational needs in the mobile space, responsive web design, web technologies, interface challenges, location awareness, cloud services and data storage.

300582.3   Technologies for Web Applications

Credit Points 10 **Level** 2

Assumed Knowledge

Basic programming principles and program control structures equivalent to that covered in Programming Fundamentals. Basic file management and PC operation including how to access and search the World Wide Web.

Prerequisite

300580.2 Programming Fundamentals

Equivalent Units

300129 - Interactive Web Site Development

Incompatible Units

300101 - Creating and Managing Web Sites, CP108A - Principles of the Internet, 101180 - Web and Time Based Design, 101922 - Web and Time-based Design

....

Building on material covered in Programming Fundamentals this unit introduces students to some of the key technologies for developing interactive and dynamic web applications from both the client and server perspective. The unit covers web site design, web site development, web page accessibility and usability, HTML, CSS, client side and server side scripting, database interaction, web site promotion (Search Engine Optimisation) and web security.

700167.2   Tertiary Study Skills in Construction Management (WSTC Prep)

Credit Points 0 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study.

700169.2   Tertiary Study Skills in Engineering (WSTC Prep)

Credit Points 0 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study.

700170.2   Tertiary Study Skills in Health Science (WSTC Prep)

Credit Points 0 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate

Units

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 471

the development of practical skills and personal attitudes necessary for success in tertiary study.

700171.2 Tertiary Study Skills in Information and Communications Technology

Credit Points 0 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study.

700173.2 Tertiary Study Skills in Science (WSTC Prep)

Credit Points 0 **Level** Z

Special Requirements

Students must be enrolled at Western Sydney University, The College.

....

This unit is designed to assist students to become successful independent reflective learners. It introduces students to a range of theories and concepts to facilitate the development of practical skills and personal attitudes necessary for success in tertiary study.

102299.1 Text, Media and Memory

Credit Points 10 **Level** 7

Special Requirements

Student must be enrolled in the Bachelor of Research Studies/Master of Research or Master of Research.

....

In 2016 this unit replaced by 102412 Global Digital Futures. This unit explores how the digital environment is profoundly changing the way we write, record, communicate and remember. Students will be encouraged to think critically about the possibilities that digital resources and methods offer interdisciplinary humanities research, including the implications of using new media formats for compiling, storing and sharing cultural and social data. The unit begins by considering the influence of earlier media, such as photography and film, on literary, historical, communication and cultural studies, so that digital innovations can be understood in a broader context. Reflecting on examples drawn from around the world, with a focus on Australia, students survey the latest digital formats, genres and knowledge practices, ranging from the personal and experimental to the institutional. These are discussed in the context of contemporary issues in areas such as digital identity and privacy, interactivity and simulation, virtual environments and the semantic web, online communities and crowdsourcing, GIS, e-research and cyberinfrastructure.

100968.3 Texts and Traditions

Credit Points 10 **Level** 1

Equivalent Units

700133 - Texts and Traditions (UWSC)

....

This unit introduces students to selected modern literature and philosophy of the Western tradition. Focusing on primary texts, the unit offers a critical appreciation of major intellectual, social, and aesthetic changes, understood as crucial elements in the shaping of Western modernity from the Enlightenment forward. The unit follows major concepts or themes, which students will study through their different cultural representations. Tensions, contradictions, and oppositions that these themes have engendered will also be examined. Students will gain an appreciation of major texts, aesthetic styles, and ways of thinking about the world and human experience, which have been central to modernity.

200118.3 The Accountant as a Consultant

Credit Points 10 **Level** 3

Prerequisite

200108.2 Contemporary Management Accounting

Equivalent Units

H3328 - The Accountant as a Management Consultant

Special Requirements

Students must seek School approval relating to ethics risks and the need for university insurance to cover engaged learning.

....

This unit focuses on the role that accountants play in the effective management of businesses, using consulting problems and "real" case studies involving a wide range of business related issues.

101738.2 The Art Game: Fraud, Forgery, Theft and Perfidy

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The content of this elective will be taught on campus, utilizing field trips, major collections and occasional visiting lecturers. The focus of the content is both the history of art fraud, theft and forgery and the implications of current art crime. This unit reflects the interest in and ramifications of the growth in art crime both domestically (particularly in the realm of indigenous art) and internationally. It will provide students with a lively knowledge of this area of the art domain, an area that is contemporary in its relevance.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 472

101957.2   The Asian Century

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit explores whether the 21st century can be referred to as the Asian Century. It addresses itself to a host of questions, including: What is the Asian Century? How does it differ from the American Century (20th Century) and the British Century (19th Century)? What are the historical, cultural and philosophical foundations of the Asian Century? How has Asia been transformed since World War II, and more recently? What are the risks and challenges for Asian states in the Asian Century? What are the challenges and the opportunities for the West (including Australia) in the Asian Century?

200549.2   The Australian Macroeconomy

Credit Points 10 **Level** 1

Assumed Knowledge

HSC Mathematics

Equivalent Units

200049 - Macroeconomics

....

This unit is an introduction to macroeconomic concepts, analysis and issues in the Australian context. Basic concepts introduced and applied include: national income accounting, economic structure, price indexes and inflation, the balance of payments, and labour market aggregates. These concepts are applied in describing and explaining the recent evolution of the Australian economy in terms of growth, structural change, price stability, and employment. This leads to a discussion of major policy issues such as the role of governments in managing economic fluctuations, and the implications of Australia's foreign liabilities. The course ends with a brief introduction to modelling income determination.

101009.3   The Body in Culture

Credit Points 10 **Level** 3

Equivalent Units

SS224A - Gender, Culture and the Body, 100286 - The Body in Culture

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit introduces students to ways of thinking about the body in late modernity. Drawing on several theoretical approaches, including psychoanalysis, phenomenology and feminism, it examines the body as a site of cultural inscription and a symbol of the social order. Key concepts include: the mind/body split; disgust and taboos; the creation of borders, surfaces and depths; and the plasticity of bodies in culture. Tutorial work will vary according to

student interest, but may include such things as: carnival, pregnancy, body modification, beauty practices, yoga, fashion, and the post-human, as well as the body politics of gender, race and class.

102207.1   The Brain and Learning

Credit Points 10 **Level** 3

Equivalent Units

101662 - Young People, Their Futures and Education

....

Interest in the relationship between the brain and how people learn is at an all-time high. Surprisingly, most theories of teaching and learning say little about the brain. In an age where 'brain-based' educational products are a multimillion-dollar industry, there is a need for students, parents, and anybody with an interest in education to have some basic knowledge of the brain. This unit is designed to provide students with a straightforward introduction into the limitations and possibilities of brain function, especially with respect to memory and learning. In addition, this unit also examines motivation, exceptional learners, and challenging groups.

300966.1   The Cosmos in Perspective: Information and Life

Credit Points 10 **Level** 2

....

Across the world and across history, humans have wondered about the universe, its history and evolution. From the Big Bang to the end of the Universe, from our own Solar System to the farthest superclusters of galaxies, our knowledge and understanding of the Universe in which we live is growing at an amazing rate. In this unit, we survey the cosmos from two different perspectives relating to complexity: The perspectives of Information and Life. From the information perspective, we examine the growth of complexity and structure in the universe, and consider the uses of information theory to understand cosmic evolution. We know that Life exists in the Universe, but know little about how common it might be - we consider the requirements for life to exist and the possibility of other life in the Universe by examining the cosmos at scales from planets to the universe. We consider cultural perspectives on the cosmos, including that of indigenous Australians. This unit is non-technical and is suitable as an introductory unit for students in computing, engineering and science, and as a general education unit for students in all other areas.

102298.1   The Cutting Edge: Advanced Studies in Humanities and Communication Arts

Credit Points 10 **Level** 7

Special Requirements

Must be enrolled in the Bachelor of Research Studies/ Master of Research or Master of Research.

....

The School of Humanities and Communication Arts teaches across a range of disciplines including Design,

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 473

Units

Music, Creative Arts, Communications and Media, Languages and Linguistics, Cultural and Social Analysis, Philosophy, Literary Studies, History and Political Thought, International Relations and Asian Studies, Indigenous Studies. This shell unit provides advanced academic training, advanced knowledge and intellectual development in the student's academic discipline by focusing on current debates in selected fields of study. The content of this unit will change according to fields of research represented in the cohort of each year, the issues of current concern in the discipline streams taught, and staff expertise. It will be taught in streamed, parallel seminars organised by broadly defined disciplinary grouping.

101591.2   The Economics of Cities and Regions

Credit Points 10 **Level** 2

Equivalent Units

101298 - Urban Development Resource Allocation

....

'Economics of cities and regions' introduces the major political-economic issues facing cities and regions. Class discussions investigate how political-economic forces (such as globalisation, structural change etc) shape the development of cities and regions. Class activities enable students to apply economic principles to urban and regional planning and policy decisions, and teach students to analyse the social and distributional impacts of policy and planning decisions.

101867.2   The Ethical Life

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit introduces students to time-honoured ethical questions and controversies. The issues to be examined point to questions that students are likely to face at some stage during their lives: Is death always a bad thing? Is abortion immoral? Are we obligated to give to charity? Should we be vegetarian? Should you have sex outside of a committed relationship? Is ethics founded upon religion, reason or community standards? As well as examining specific issues, students will be introduced to the leading secular and theistic ethical theories.

401184.1   The High Risk Foot

Credit Points 10 **Level** 4

Assumed Knowledge

All core units are assumed knowledge

Prerequisite

401180.1 Musculoskeletal Disorders and Imaging AND **400933.2** Podiatry Pre-Clinical AND **400138.3** Pathophysiology 1

Corequisite

400929.2 Podiatric Practice 1

Incompatible Units

400941 - Podiatric Techniques 3C

Special Requirements

Students must be enrolled in 4708 Bachelor of Podiatric Medicine and 4709 Bachelor of Podiatric Medicine (Honours). This unit builds on previous podiatry specific clinical and theory units

....

The unit builds on fundamentals of pathophysiology and podiatry specific units to understand and manage the impact of systemic disease on foot health. The unit specifically investigates pathology associated with the 'high risk foot' including lower extremity manifestations associated with vascular, endocrine, neurological pathology and immunosuppression. This unit aims to develop comprehensive, coherent and connected knowledge to assist making informed decisions and contribute to sustainable change and improvements in health care for people with systemic disease, with particularly emphasis on diabetes and wound management.

101782.2   The History and Politics of Contemporary Central Asia

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit will introduce students to the contemporary history and politics of Central Asia. With the collapse of the Soviet Union, the region of Central Asia (encompassing Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) has reclaimed its importance as a political, economic, and cultural region. Located in a key geo-strategic position between Russia, China, South Asia, and Iran, and with extensive natural resources (especially oil and gas), the region has attracted significant policy and popular attention. The aim of this unit is to introduce students to key domestic and regional issues affecting Central Asia. The unit will look at the historical legacy of Russian and Soviet regimes, the broad effects of post-Soviet independence, the politics and economics of state-building, and the roles played by international actors and organizations. The unit will also examine how government efforts to build states, nations, and economies historically and recently have influenced societal institutions, such as Islam, community groups, and gender relations.

101783.2   The International Relations of the Middle East Since 1945

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit offers a historical study of the international relations of the Middle East from 1945 to the present. It examines the relations of Middle Eastern states to global

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 474

structures of power; the pattern of relations between regional states; the causes of regional wars and international co-operation; the impact of domestic factors on the foreign policy of states; the importance of oil to international politics and the global economy; and the role of ideologies and non-state forces in international relations and between states in the Middle East.

101757.1   The Making of the `Aborigines'

Credit Points 10 **Level** 3

Prerequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all undergraduate students who have open electives. The Making of the 'Aborigines' explores the complex human relations and historical forces that have constructed Australia's indigenous people as 'Aboriginal' and/or 'Torres Strait Islander'. It will involve a critical examination of a range of contemporary social and political issues impacting on and being engaged by Indigenous people. A more comprehensive understanding of the position of Indigenous people in contemporary Australian society will enable students to engage more effectively with Indigenous people.

101795.3   The Musical

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

The Musical will involve the examination of the history and development of the stage musical in its social and cultural context. The unit will also explore the structure of the musical as a 'text' and performance genre, looking closely at narrative structure, the structure of songs and the construction of character types and interaction. 'The Musical' will also involve students in the critical analysis of the representation of gender and race in the stage musical.

100893.4   The Novel

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit explores the status and success of the novel as the dominant modern literary form. It examines aspects of the history and development of the novel from the seventeenth century up to the present, along with a range of novelistic texts from one or a number of literary traditions: from classic British and/or American texts to contemporary postcolonial fiction; from the search for the mythical "great Australian novel" to famous and not-so-famous works in languages other than English.

102005.1   The Politics of Civilisation

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

What is civilisation? What are civilisations? What does it mean to be civilised? What does it mean to be uncivilised, barbaric or savage? These are some of the key questions explored in this unit. We will investigate the normative demands of civilisation, from 16th Century European colonial 'civilising missions' to the 21st Century global war on terror. We will explore the history of relations between civilisations in light of the 'clash of civilisations' thesis, including relations between the Western and Islamic worlds. We will discover the power of ideas and the influence they can have on real world policy-making.

101911.2   The Qur'an: An Introduction

Credit Points 10 **Level** 2

Prerequisite

101462.2 Understanding Islam and Muslim Societies

Equivalent Units

101464 - Great Texts of Islam: Qur'an and Hadith

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit is an introduction, in English translation, to the most important text of Islam, the Qur'an, which Muslims regard as the primary source of Islam. Students will study: the origins of the Qur'an, its overall structure and content, major themes, approaches to its interpretation, and its function in Muslim religious, social, cultural and political life. The themes and topics covered (such as God, ethics, women, state, inter-faith relations, and violence) should assist students in understanding contemporary debates on the relevance of Islam today.

101990.1   The Racial State

Credit Points 10 **Level** 2

Equivalent Units

100273 - New Ethnicities, Old Racisms

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Racism is often thought of as both primordial and pathological. Racist states, such as Apartheid South Africa or Nazi Germany, are usually considered to be exceptions rather than the rule and mainly a thing of the past. This unit examines the ways in which, despite the challenge to racism, race remains a fundamental organising idea in modern western states, one that has a direct affect on our everyday realities. We will examine how race is reproduced

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 475

through politics, culture, socialisation and economic structures. We will consider the effects this has on individual and societal lived experience in complex post-immigration, postcolonial societies.

200915.1   The Service Enterprise

Credit Points 10 **Level** 2

Assumed Knowledge

Students should have a foundation knowledge of business markets and enterprise structure.

Equivalent Units

200376 - Managing and Developing Careers, 200914 - Working in Professions

Special Requirements

Successful completion of 60 credit points.

....

Modern economies are increasingly service-based. Knowledge and skills in the field of services are required by people operating across various industries and in a range of roles. Business graduates will either work for firms whose central offering is service or be employed by organisations that use service as an integral supporting element in what they do and what they offer. The unit aims to expose students to relevant theory and practices in order to develop their abilities for potential career opportunities in a service environment.

102042.1   The Sound of Language

Credit Points 10 **Level** 1

Equivalent Units

101873 - The Sound of Langauge

....

The richness of information conveyed through spoken language owes its form to the combination and recombination of a small number of sounds. In this unit, students will learn the sounds of the world's languages (phonetics) and the ways in which they are combined to build words (phonology). Examples will draw from English, Australian Aboriginal languages, and a diverse range of languages spoken around the world.

101880.1   The Space of Literature

Credit Points 10 **Level** 3

Assumed Knowledge

An idea of the genre of the English novel and a history of imperialismn.

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit considers philosophies of writing by 'drilling down' through the work of one philosopher or through a survey of philosophers. Philosophies of writing are found in the thinking of the Sophists, Classical Greek philosophy, Continental philosophy, as well as in the work of philosophers of new media. The focus upon philosophies of

writing is to develop student's understanding of the pragmatic and performative nature of writing and with that the question of ethics in relation to creative writing. These are important concepts to advanced literary theory inquiry and will be tackled in this unit in depth.

101294.3   The Western Philosophical Tradition

Credit Points 10 **Level** 2

Equivalent Units

63286 - The Western Philosophical Tradition, 101912 - Western Political Philosophy

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

In 2013, this unit replaced by 101912 - Western Political Philosophy. The major social and political philosophy of the West, from the 5th century BC Greece till the 18th century will be examined. The development of ideas of citizenship, subjectivity, freedom, equality and the democratic state will be explored. The influence of Christianity will also be a major theme. Authors will include: Plato, Aristotle, Augustine, Aquinas, More, Hobbes, Locke, Vico, Rousseau.

200705.2   The World of Sport Management

Credit Points 10 **Level** 1

Equivalent Units

400319 - Sport Management 1, 200564 - Introduction to Sport Management

....

The World of Sport Management offers a contemporary view of sport organisations which are uniquely situated within a broader social, cultural and political environment and requires a different managerial approach. Students will be exposed to key areas within the sport management field including developing goals, decision making, strategic planning, leadership styles, and human resource management.

102001.1   Theories and Methods of History

Credit Points 10 **Level** 3

Assumed Knowledge

Students are expected to have completed prior study in the HPT major and to understand the conventions of essay writing and referencing in history.

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

In this unit we consider the nature of historical inquiry by looking at ways in which historians have theorised history, and at debates about the meaning of historical truth and knowledge. We consider a wide range of historical approaches and methodologies, and read the discussions among historiographical theorists and philosophers, as well as those among historians contesting methodological

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 476

questions in relation to specific historical topics. We also consider the challenges posed by particular kinds of sources. Students will have the opportunity to develop their own essay project with guidance from specialised staff.

101913.1 Theories of Authority

Credit Points 10 **Level** 3

Equivalent Units

101665 - Politics and Religion

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The unit will trace the idea of authority in the West back to its genesis in Ancient Greece and track its development in modern thought. The aim is to demonstrate the variegated relation between power, law and revolution by closely examining a wide array of texts in a variety of disciplinary fields, including literature.

100969.2 Theories of Conflict and Violence

Credit Points 10 **Level** 3

Equivalent Units

100288 - Theories of Violence and Conflict

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Why do humans kill? What is the nature of war? This course is a selection of different established theories offering explanations of human violence and social conflict. Both theories of individual violence and aggression, and collective conflict are studied to give students a perspective on the forces behind these phenomena. Theories from politics, philosophy, psychoanalysis, sociobiology, sociology, and cultural studies are introduced to exemplify the classic positions and lines of reasoning. These are used to question and explain current forms of violence and conflict, and to give students better understanding of the issues behind attempts to forestall, manage or end conflict.

102176.1 Theories of Difference and Diversity

Credit Points 10 **Level** 7

Assumed Knowledge

Undergraduate degree in the Social Sciences or equivalent.

Special Requirements

Students must be enrolled in a postgraduate course.

....

This unit will introduce students at post-graduate level to contemporary theories and concepts of difference and diversity. The unit will particularly examine feminism, post-structuralism, new materialism, queer theory and critical realism. It will also address specific concepts such as inequality, human rights, freedom and marginalisation. It will apply these theories and concepts to investigations of

contemporary social issues and debates related to race, disability, ethnicity, sexuality, gender and other categories of individual identity and collective belonging. The unit will provide a strong theoretical base to the work that students have undertaken in the unit Theories for Critical Practice, and inform the work to be undertaken in the other units in this specialisation.

400254.2 Therapeutic Recreation Professional Project

Credit Points 10 **Level** 3

Prerequisite

400863.1 Foundations of Research and Evidence-Based Practice AND **400252.1** Workplace Learning 2 (Community Placement)

....

The aim of this unit is for students to apply their knowledge of professional theory, practice, research and evaluation skills to the investigation of a therapeutic recreation professional issue. Emphasis in the unit is on the development of a research/evaluation proposal through literature review and research design outline of a program with a proposed method of evaluation suitable for use in a community setting.

300759.1 Thermal and Fluid Engineering

Credit Points 10 **Level** 3

Prerequisite

300762.1 Fluid Mechanics AND **300760.1** Thermodynamics and Heat Transfer

....

The unit provides an understanding of thermo-fluid principles and their engineering applications involving thermal processes and energy conversion. Laminar, , turbulent and compressible fluid flows are discussed. Fluid-structure interactions, buoyancy driven flows and other special thermal and fluid engineering topic are also covered. Basic computational techniques to solve thermodynamics and fluid flow problems are introduced. The theories learned in classes will be reinforced in laboratory sessions and through assignments and tutorials.

300760.1 Thermodynamics and Heat Transfer

Credit Points 10 **Level** 3

Prerequisite

200238.1 Mathematics for Engineers 2 AND **300963.1** Engineering Physics OR **300464.2** Physics and Materials

....

This unit introduces students to the fundamentals of thermodynamics and heat transfer. The unit covers the properties of thermodynamic systems, laws of thermodynamics, energy, work and heat, entropy, reversible and irreversible processes, power and refrigeration cycles, heat conduction, natural and forced convection, radiation heat transfer, heat exchanger.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 477

Units

301108.1   Thinking About Data

Credit Points 10 **Level** 1

Assumed Knowledge

2 unit High School Mathematics.

Special Requirements

Access to a Computer.

....

This Unit covers basic concepts of data centric thinking. The main areas discussed are; Populations and Samples; Sampling concepts; Types of Data; Descriptive Methods; Estimation and Inference; Modelling. The Unit takes a computational and nonparametric approach, before briefly discussing theoretical concepts and distribution theory.

101989.1   Thinking Cinema

Credit Points 10 **Level** 2

Equivalent Units

101856 - Film and Philosophy

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

This unit considers the many ways in which we 'think cinema' through close examinations of key philosophical and theoretical writings on film (incorporating hermeneutic, phenomenological, ontological, psychoanalytic, cognitivist and aesthetic approaches). Treating cinema as a philosophical medium in its own right, the unit explores the ways in which philosophical concepts have been taken up and addressed by film, as well as considering the ways in which cinema has in turn influenced philosophy.

300739.2   Timber Structures (UG)

Credit Points 10 **Level** 4

Prerequisite

300733.2 Introduction to Structural Engineering

Corequisite

300732.2 Structural Analysis

Equivalent Units

85015 - Timber Structures (UG)

....

Students learn about the engineering properties of timber and assess it as a construction material. Design methods based on structural mechanics are covered including the design of members and connections.

200038.3   Time Series and Forecasting

Credit Points 10 **Level** 3

Prerequisite

200033.4 Applied Statistics

....

From 2016 this unit has been replaced by 301035 Environmental Informatics. This unit is an introduction to the statistical theory and practice of Time Series Analysis. A time series is an ordered sequence of observations through time. The unit is designed to provide students with the basic techniques in time series analysis: model identification, parameter estimation, diagnostic checking and prediction of future values. Emphasis in this unit is on practice, the applications of time series analysis in economics, finance, engineering and scientific research. Statistical computing packages are used.

300893.1   Topics in Medical Science

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in 3673 Bachelor of Medical Science, 3674 Bachelor of Medical Science (Nanotechnology) or 3682 Bachelor of Medical Science (Advanced). Succesful completion of 80 credit points at Level 2 or 3.

....

This unit builds on the content and concepts developed across multiple discipline areas during the Bachelor of Medical Science, integrating them together into the context of human health and disease. Students will work in groups to undertake an in depth exploration of an issue related to Medical Science. Topics addressed each year will vary, and will include issues currently at the forefront of Medical Science, issues for which there is currently significant scientific debate, and issues in which students have expressed a particular personal interest.

300819.1   Topics in Physiology

Credit Points 10 **Level** 3

Prerequisite

300818.1 Introduction to Physiology OR **300838.1** Comparative Physiology OR **300851.1** Advanced Physiology

Equivalent Units

300756 - Topics in Physiology

....

This unit builds on the physiological concepts of "Introduction to Physiology". It provides a greater depth and breadth of understanding of aspects of whole-body physiology which are explored in group work. Topics may include, but are not limited to, locomotion, physiology of reproductive technology, physiology of interaction between humans, physiology under extreme conditions (including pathophysiology), physiology of learning and memory, sleep physiology, animal physiology, nutritional physiology and others.

200008.3   Torts Law

Credit Points 10 **Level** 2

Corequisite

200006.2 Introduction to Law

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 478

Equivalent Units

69030 - Torts Law, F1004 - Torts, LW302A -Torts Law

....

Torts law is the first substantive law unit in the LLB. It introduces students to the legal principles and policy of a variety of torts, defences and remedies. The unit also introduces students to the generic legal skills of case reading, analysis and note taking, statutory interpretation and legal problem solving, as well as placing the law in the wider political and social context.

300877.1 Toxicology

Credit Points 10 **Level** 2

Equivalent Units

300627 - Toxicology

....

Toxicology is the study of toxicants or poisonous substances: their nature, effects on the human body, and on human, animal and plant populations. Poisonous substances have been used by humans from antiquity for both beneficial and malevolent purposes and today a vast array of toxic industrial chemicals are produced. Both accidental (workplace and environmental) and intentional (forensic) exposure are covered, in terms of group properties, chronic and acute, toxicity, exposure potential, health impact and intervention are presented through forensic case studies. Students carry out a toxicology audit of an operation or premises of their choice.

400346.2 Traditional Chinese Medicine 1

Credit Points 10 **Level** 1

....

This unit provides a comprehensive introduction to traditional Chinese medicine (TCM). Students are introduced to basic TCM theory, and the physiological principles of the diagnostic system that forms the basis of TCM practice. The history and philosophy of Chinese medicine is introduced and discussed in the light of contemporary clinical practice.

400348.2 Traditional Chinese Medicine 2

Credit Points 10 **Level** 1

Assumed Knowledge

Prior knowledge equivalent to Traditional Chinese Medicine 1.

....

This unit provides learning experiences that enable students to expand upon their understanding of TCM philosophy and principles, with particular reference to developing diagnostic skills in TCM. Students acquire basic skills in case history taking, interpretation of relevant signs and symptoms, arriving at a TCM diagnosis, and devising suitable treatment strategies.

400352.2 Traditional Chinese Medicine 3

Credit Points 10 **Level** 2

....

This unit enables students to develop a sound understanding of causes of disease in TCM with a particular focus on disease pattern differentiation. This is complemented by the reinforcement of skills in case history taking and TCM diagnostics.

400354.2 Traditional Chinese Medicine Practice 1

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge equivalent to Traditional Chinese Medicine 3, and Acupuncture 2, and Chinese Herbal Medicine 2.

Special Requirements

Students must have completed a Work Cover approved First Aid Certificate.

....

This unit is focused on introductory clinical practice in a clinical setting. It enables the students to link theory with practice. It expands the students' knowledge base of acupuncture and Chinese herbal medicine, as well as Chinese language in practice of Chinese medicine. Students assist with clinical practice and perform basic acupuncture related techniques. Students will also learn basic skills in handling herbal preparation, processing and dispensing.

400356.2 Traditional Chinese Medicine Practice 2

Credit Points 10 **Level** 3

Assumed Knowledge

Assumed knowledge and experience equivalent to Traditional Chinese Medicine Practice 1.

Special Requirements

To undertake this unit, students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 OR a Student Undertaking Form after 1 June 2010 and have applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 OR a Working with Children Check Student Declaration after 1 June 2010. Students must have completed a Work Cover approved First Aid Certificate.

....

This unit is focused on clinical practice in a clinical setting. It enables the student to link theory with practice. It expands the students knowledge base of acupuncture and Chinese herbal medicine, as well as TCM theory and diagnostics. Students facilitate clinical practice and perform a wide range of acupuncture and related techniques, in addition to basic herbal prescribing.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 479

401101.1 Traditional Chinese Medicine Practice 3

Credit Points 10 **Level** 4

Assumed Knowledge

It is assumed the student will have a thorough knowledge of TCM theory, acupuncture and Chinese herbal medicine and have completed a significant number of clinical hours under supervision. As a core competency in registered TCM practice this is not a suitable unit for other health disciplines.

Incompatible Units

400920 - TCM Practice 3 (PG) AND 400359 - TCM Practice 3

Special Requirements

Must be enrolled in Traditional Chinese Medicine course.

....

This unit represents a continuation of the clinical practicum and development of clinical skills. Students will also be able to apply their knowledge of professional theory, practice, research and evaluation skills to the investigation of TCM problem. Students will be expected to demonstrate competence in handling patients in a clinical context, synthesise knowledge from their studies of specialities in Traditional Chinese Medicine and critically examine the practical aspects of acupuncture and Chinese herbal medicine research. Students will also learn basic knowledge of health preservation and enhancement including lifestyle, diet and physical exercise.

401105.1 Traditional Chinese Medicine Practice 4

Credit Points 10 **Level** 4

Assumed Knowledge

It is assumed the student will have a thorough knowledge of TCM theory, acupuncture and Chinese herbal medicine and have completed a significant number of clinical hours under supervision. As a core competency in registered TCM practice this is not a suitable unit for other health disciplines.

Incompatible Units

400924 - TCM Practice 4 (PG) AND 400362 - TCM Practice 4

Special Requirements

Must be enrolled in Traditional Chinese Medicine course.

....

This unit represents a continuation of the clinical practicum and development of clinical skills. Students will be able to integrate their theoretical knowledge, practice skills and research base to the investigation, diagnosis and supervised treatment of patients in a clinical context. Students will be able to synthesise knowledge and competency in the practice of clinical areas of focus taught in Chinese Medicine I and II, and Specialties in Traditional Chinese Medicine (TCM) I and II. Students will be expected to demonstrate professional competence in handling patients in a clinical context, diagnosing more complex cases and devising and managing the integrated care of patients using TCM.

401164.1 Transferable Research Skills

Credit Points 10 **Level** 7

Assumed Knowledge

Students will have completed an undergraduate degree in a related discipline area

Special Requirements

Active researcher on the graduate supervisory register is required to supervise students. Students will be required to supply appropriate protective clothing for laboratory or fieldwork training.

....

This unit is an elective unit as part of the Master of Research and provides training in essential skills for research students in the health, medical, biomedical and natural sciences. Students will select two modules that will provide experience in advanced techniques and methodologies directly relevant to a specific area of research. It is expected that this unit, together with the unit Experimental Design and Analysis, will provide students in the health, medical, biomedical and natural sciences with a solid foundation before commencing the research project in the second year of the Master of Research degree.

102180.2 Translation from Theory and Research to Policy

Credit Points 10 **Level** 7

Special Requirements

This unit is only available to Postgraduate students.

....

The focus of study in this unit is on policy-making and implementation and the place of theory and research in policy formation. In the first part of the unit students explore the nature of public policy – addressing constructs of policy and policy-making and approaches to analysing public policy. The political and social practices of policy-making and implementation in Australia are contextualised and examined at the local, national and global levels. The second part of the unit takes examples of policy-making in the field of social sciences and examines the role of theory and research in the problematisation of issues and identification of solutions. The identification of competing interests, relations of power and key players in understanding, analysing and responding to policy and its outcomes will be undertaken.

102198.1 Transnational Crime

Credit Points 10 **Level** 7

Assumed Knowledge

Undergraduate degree in criminology, criminal justice or a related social science area, or equivalent.

Special Requirements

Students must be enrolled in a postgraduate course.

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 480

Western Sydney University

In traditional criminology crimes have been understood as acts that breach the criminal code of a given nation state. By contrast, transnational crimes are defined as violations of law that embrace more than one nation in their planning, operation or impact. These crimes often have a much broader (though often veiled) relation to serious individual and collective social harm and can be especially difficult to prevent or investigate and prosecute. Students will be expected to understand the global and regional developments that foster transnational crime, its range and security impacts, and international agreements and conventions as well the new forms of policing developed to counter it.

101645.2   Transport, Access and Equity

Credit Points 10 **Level** 3

Equivalent Units

400342 - Transport, Access and Equity

Special Requirements

Successful completion of 80 credit points.

....

This unit examines the equity and efficiency issues in the provision of transport in cities and regions from a critical social science perspective. Issues of transport disadvantage and policy and planning responses to improve access to urban services are examined. The social and environmental impact of transport systems are considered in the context of urban management.

300982.1   Transportation Engineering

Credit Points 10 **Level** 4

Prerequisite

300738.3 Surveying for Engineers AND **300984.1** Pavement Materials and Design AND **300765.2** Hydraulics

Incompatible Units

300486 - Infrastructure Engineering

....

This unit provides students with the course material that will assist them with the execution of Civil Engineering Construction and Urban Development / Town Planning projects. The unit mainly focuses on the planning, design and construction of transportation facilities for urban and rural areas. Students will have an opportunity to implement the skills learnt using a case of a subdivision development.

401071.1   Traumatic and Environmental Emergencies

Credit Points 10 **Level** 3

Special Requirements

Students must be enrolled in 4669 Bachelor of Health Science (Paramedicine).

....

This unit deals with the paramedic response to major traumatic injuries and environmental emergencies. Students will learn about the epidemiology of trauma in Australia, mechanism of injury, and evidence-based management of traumatic and environmental emergencies in the out-of-hospital context. Paramedic responses to major incidents and multi-casualty situations will be examined and students will learn the principles of major incident management and multi-casualty trauma triage.

101983.1   Truth and Knowledge

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Attaining knowledge and defining truth are fundamental concerns for all university studies. Philosophy has a long history of explaining what constitutes truth, and how we know what counts as legitimate knowledge. This unit introduces students to the most important conceptions of truth and knowledge, and explains the fundamental methods of reasoning and testing knowledge claims established through the Western philosophical tradition. It should be useful to both studentsspecialising in philosophy, and those interested in discovering more about how knowledge is justified and standards of truth established.

101999.1   Twentieth Century Australia

Credit Points 10 **Level** 3

Equivalent Units

100986 - Australian History since 1860 - 1920, 100987 - Australian History since 1920

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

Beginning with the Federation celebrations in 1901; this survey unit provides an overview of major events in Australian political, cultural and social history during the twentieth century . The unit will examin key events such as World Wars and the Great Depression, but will also discuss broarder changes that affected Australians, black and white, male and female, rich and poor. In doing so, it will examine some of the ideas and political movements that dominated twentieth century Australia, including class politics, feminism, imperial loyalty, indigenous politics, nationalism, racism and sectarianism.

101798.2   Understanding Freedom

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points

....

"Understanding Freedom" consists of a close analysis of major theories of freedom from ancient times to the contemporary world. It explores the relation between freedom and imprisonment, freedom and politics, freedom and the everyday, as well as the way that freedom informs the production of culture.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 481

101462.2   Understanding Islam and Muslim Societies

Credit Points 10 **Level** 1

....

This is an introductory level unit that forms part of the Islamic Studies major. The unit will contribute to the development of sound disciplinary expertise in the academic study of Islam - historical and sociological. The unit will familiarise students with critical approaches to the study of Islam that touch on its origins and development, formation of traditions, social structures and institutions as well as familiarising students with issues regarding Islam in the Western context. The unit will assist students to develop cross-cultural awareness and interaction, communication and interpersonal skills, inventiveness and a capacity for independent thinking and analysis and problem solving skills.

300812.1   Understanding Landscape

Credit Points 10 **Level** 1

Equivalent Units

300642 - Understanding Landscape, HT103A - Understanding Landscape

....

This unit explores the historical and cultural perceptions and perspectives of the term 'landscape' and the sustainability and management of landscapes. Students become familiar with the terminology and concepts surrounding the natural landscape experientially through a series of field trips and develop an awareness and appreciation of both of the conceptual and actual landscape issues. Skills in mapping and spatial awareness skills and technologies will be developed through field trips and workshop sessions including GIS. Such skills will assist in developing a capacity to comprehensively describe and analyse the landscape.

101731.3   Understanding Power

Credit Points 10 **Level** 3

Equivalent Units

100970 - Understanding Power

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit aims to explore contemporary understandings of power and its various manifestations in the modern world. Numerous themes are considered including informal and formal mechanisms of power, the uses and abuses of power, resistance, plus various examples of "powered" sites. The unit examines the relation between power, violence and the state. The unit concentrates on a few, influential theorists of power. Particular attention is paid to how power has an impact on the production of culture.

101979.1   Understanding Visual Culture

Credit Points 10 **Level** 1

....

Visual media are a major feature of everyday life in contemporary society. The circulation of images shapes our sense of who we are individually and collectively; how we move through the world; and the possibilities that exist for enacting social change. This unit introduces students to the histories and theories of visual culture, from painting and photography, through cinema and television, to digital media, including social media and user-generated content. Students will gain practical skills in analyzing visual and audiovisual texts as well as a comprehensive understanding of the role of visual culture in the production and maintenance of power relations. These skills are crucial to engaging critically with contemporary culture.

101866.1   United States Government and Politics

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit provides an overview of the major institutions and branches of the United States government. It draws attention to the interaction between the ideas that have been articulated by American social and political movements, and the institutions and goals of the American government as they have unfolded over time.

300860.1   Urban Environment

Credit Points 10 **Level** 3

Equivalent Units

300789 - Urban Environment

Incompatible Units

LW212A - Environmental Health Law; 300471 - Urban Development Systems; 300704 - Healthy Built Environments

Special Requirements

Successful completion of 120 credit points

....

This unit explores the relationships between community, the natural environment and government within an urban context through considering how housing and urban development can influence population health. Concepts explored include "healthy housing", "active living" "safety by design" and "energy efficiency". Through a combination of case studies and practical field experience, students will develop the skills and knowledge appropriate to assessing the "healthiness" and sustainability of urban environments. The unit examines methods of construction and building regulation aimed at the preservation of health and amenity.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 482

100291.5   Urban Life/Urban Culture

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Big cities can be frantic, difficult, polluted and often dangerous places in which to live. Yet cities also contain possibilities for social and cultural stimulation not available elsewhere. This unit traces the origins and development of modern cities in all of their complexity. It looks at how industrial cities emerged in Europe and Australia, and at the threat that uncontrolled urban growth posed to social order. We examine the conditions of urban life that promote alienation and anonymity, and how people overcome social fragmentation. There is discussion of modern cities - from those that sprawl, like Sydney, to the relatively compact and dense centres of Europe, the north-eastern United States and Asia. We look at the gendered nature of public space, and how class and ethnic tensions are played out in cities. Students read a range of texts on urban culture and society. These include classic works by writers like Friedrich Engels, George Simmel and Walter Benjamin, to the contemporary work of David Harvey, Richard Sennet and Mike Davis.

300861.1   Vertebrate Biodiversity

Credit Points 10 **Level** 3

Prerequisite

300802.1 Biodiversity

Equivalent Units

300217 - Animal Form & Function; 300470 - Vertebrate Biodiversity

Special Requirements

Successful completion of 80 credit points

....

Vertebrates are the most recognisable and likeable of all the animals. The unit will provide students with a theoretical and practical working knowledge of vertebrate species and their biodiversity, and the adaptation of their many biological functions. Identification of major groups of animals from several different environments will also be incorporated into the learning outcomes. Students will learn to conduct field surveys and assess the techniques used to survey vertebrates, as well as learn basic handling and husbandry techniques required for different vertebrate species.

300862.2   Video Games Development

Credit Points 10 **Level** 3

Assumed Knowledge

Understanding of programming concepts and details of programming. Good programming skills in C#, Java or C++. Knowledge of systems analysis methods including object orientated analysis and design. Basic knowledge of vector algebra, matrixes and fundamentals of mathematics.

Prerequisite

300580.2 Programming Fundamentals

Equivalent Units

300492 - Games Theory and Design

....

This unit provides students with an in-depth understanding of the development and structure of game engines. It provides the student with a unifying overview of the many modules that are incorporated in a game engine as well as a detailed examination of game-play and engine programming.

101898.1   Violence in Everyday Life

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

The unit provides an overview of the 'dark side' of human society and culture - violence. It examines how violence shapes, threatens and informs aspects of everyday life at home, work, school, the sports field and the street. Through a series of structured learning activities students engage with a range of documents and images to explore practices and experiences of violence. The role of institutions like the state, churches and sporting bodies in regulating violence will be considered. Students will gain skills in understanding the cultural milieu of marginal groups, languages of power and the emotions of excitement, fear and terror produced by acts of violence, skills useful for effective functioning in the workplace and family. The unit provides skills for honours level research in social and cultural analysis, law and legal studies, criminology, and history and political thought.

102199.1   Violence, Culture and Criminal Justice

Credit Points 10 **Level** 7

Assumed Knowledge

Undergraduate degree in criminology, criminal justice or a related social science area; or equivalent.

Special Requirements

Students must be enrolled in a postgraduate course.

....

In recent decades, a new wave of racial, ethnic and religious violence and terrorism has been linked to rapid patterns of globalisation and tensions over group and national identities. Specific knowledge about violence and considerations about its real extent, causes and cultural meanings remain uncertain. Yet there is evidence of a recent general decline in violence with a significant role for legal and quasi-legal bodies for acknowledging injury, punishing previously 'deniable' violence and promoting reconciliation. Seminar topics in this course will include the global patterns and forms of violence; individual versus societal and historical explanations; biology, evolution and culture; gender, race and inequality; hatred, genocide,

Units

collective identity and psychoanalysis; the role of states and law in countering and condoning interpersonal and collective violence; debates about victimhood and the cultural symbols of violence and its memorialisation.

301109.1   Visual Analytics

Credit Points 10 **Level** 2

Assumed Knowledge

Familiarity with computer software programs, such as Microsoft Office.

Prerequisite

301033.1 Introduction to Data Science

Special Requirements

Access to a Computer.

....

This unit introduces the fundamentals and technologies of visual analytics to understand big data. It covers major concepts of information visualisation, human computer perception and methods for visual data analysis. Students will learn knowledge and skills for identifying suitable visual analytics techniques, methods and tools for handling various data sets and applications. The unit provides students with opportunities to explore novel research in visual analytics and visualisation.

101871.2   War

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

The soldier might almost challenge the prostitute for the title of "world's oldest profession." This course will examine how statespeople have understood the purposes of war throughout history, and in a global perspective. It will evaluate the practices and norms associated with war in different eras as well as the experiences of soldiers/sailors/airmen in different wars. It will assess the role of professional armies and warrior classes throughout history, as well as the role of navies, air forces, nuclear weapons, terrorism, guerrilla warfare, just war theory, and the doctrine of pre-emption over the last century. This unit utilizes history and political science methodologies to address these vital questions.

101375.2   War and Peace

Credit Points 10 **Level** 3

Incompatible Units

63088 - War and Peace

Special Requirements

Successful completion of 60 credit points

....

This unit examines problems and issues in international politics. In particular the unit critically assesses the major theoretical paradigms associated with attempts to explain international behaviour of key individuals, nations and the

international system. Major issues and key problems in world affairs since the end of World War Two (such as justice and equality, human rights and terrorism) are examined.

101993.1   War and Society in the Twentieth Century

Credit Points 10 **Level** 3

Equivalent Units

100293 - War and Society: 20th Century Australia

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit explores the social and cultural history of warfare in the twentieth century, with a particular emphasis on the experience of 'ordinary' men and women during the First and Second World Wars. Drawing on case studies and scholarship from Australia, Britain and the United States, students will examine a diverse range of topics and themes, including the politics of gender, class and race in wartime; the development of medicine and psychiatry in response to mass casualties; repatriation and reintegration at war's end; and evolving practices of commemorating the war dead.

102142.1   Warlords, Artists and Emperors: Power and Authority in Japanese History

Credit Points 10 **Level** 3

Equivalent Units

100294 - Warlords, Artists and Emperors: Power and Authority in Premodern Japan

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines the key institutions and events of Japanese history that have given shape to the modern nation and its distinctive cultural identity. What is the traditional significance of the Emperor and how does it compare with the role of the Emperor since 1868? Who held the power and under what authority? How did this shift over time? What was the relationship between religion and the state? How did the Shoguns come to power? How did art and architecture function in the expression and maintenance of warlord power? What is the connection between the balance of power and urban development in the Tokugawa period? Why is Zen Buddhism now so closely associated with samurai and the arts? These are some of the questions that will be addressed in this unit.

300994.1   Waste Management

Credit Points 10 **Level** 4

Prerequisite

300737.3 Environmental Engineering

....

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 484

This unit covers sources identification and characterisation of solid and hazardous waste generated from the community. Sustainable management of waste incorporating minimisation, recycle, recovery and disposable options are discussed. Also, atmospheric pollutants and their control, greenhouse gases and their impact on climate change are examined.

300992.1   Water and Wastewater Treatment

Credit Points 10 **Level** 4

Prerequisite

300737.3 Environmental Engineering AND **300765.2** Hydraulics

....

The unit focuses on design of conventional and advanced water and wastewater treatment unit design using fundamental science and hydraulic engineering principles.

300870.1   Water in the Landscape

Credit Points 10 **Level** 3

Equivalent Units

300779 - Water in the Landscape

Special Requirements

Successful completion of 120 credit points.

....

Many land and water use activities in both urban and rural landscape result in hydrologic changes that have environmental, economic and social consequences. These activities require appropriate management strategies for sustainable water use in catchment. In this unit, the hydrologic cycle will be explored at varying spatial scales in urban and rural contexts. Hydrologic, environmental, economic and social perspectives will be used in the examination of the demand and the use of water.

300814.1   Water Quality Assessment and Management

Credit Points 10 **Level** 1

Equivalent Units

300635 - Water Quality Assessment and Management

....

Water is essential for all life on earth. This unit will equip students with skills in biological, chemical and physical water quality assessment for a sustainable water future. The unit introduces students to healthy natural waterways and contrasting degraded waters impacted by disturbance from human activities. A broad range of pollutants, their sources and the consequences for human health and the ecology of water ways will be investigated. Management strategies will also be examined based on the sound scientific assessment of water quality. Students in this unit will cover water quality legislation, regulation, policy, guidelines and develop competencies in water monitoring, regulation, treatment and management.

300993.1   Water Resource Engineering

Credit Points 10 **Level** 4

Prerequisite

300765.2 Hydraulics

....

This unit introduces optimisation theories applicable to water resources projects. The unit applies different optimisation models to select the best option available. Engineering economic theories specifically applicable to water resources projects are also discussed.

300583.2   Web Systems Development

Credit Points 10 **Level** 3

Assumed Knowledge

Principles of systems analysis and design including the specification of end-user requirements and a good knowledge of the SDLC and its application to solving computer system related problems (equivalent to successful completion of 300585 SAD or similar). Principles of data analysis, relational database design and development, practical skills in SQL (equivalent to successful completion of 300104 DDD or similar).

Prerequisite

300582.2 Technologies for Web Applications

Equivalent Units

300085 - Advanced Web Site Development

....

In this unit students further develop their theoretical and practical skills in designing and developing web based information systems using systems analysis, programming, database, human computer interaction and web technologies skills that they have learnt in previous units. Current web development technologies and/or frameworks will be utilised to build a complex web information system in a collaborative web development team. Techniques of porting web systems to mobile platforms will also be explored.

300902.1   Web Systems Development (Advanced)

Credit Points 10 **Level** 3

Assumed Knowledge

Principles of systems analysis and design including the specification of end-user requirements and a good knowledge of the SDLC and its application to solving computer system related problems (equivalent to successful completion of 300585 SAD or similar). Principles of data analysis, relational database design and development, practical skills in SQL (equivalent to successful completion of 300104 DDD or similar).

Prerequisite

300582.2 Technologies for Web Applications

Incompatible Units

300583 - Web Systems Development

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 485

Special Requirements

Students must be enrolled in 3684 Bachelor of Information and Communications Technology (Advanced) or 3685 Bachelor of Computing (Information Systems) Advanced

....

Students will further develop their theoretical and practical skills in designing and developing web based information systems using systems analysis, programming, database, human computer interaction and web technologies skills that they have learnt in previous units. Current web development technologies and/or frameworks will be utilised to build a complex web information system in a collaborative web development team. Techniques of porting web systems to mobile platforms will also be explored. Students in this advanced unit will also investigate and apply advanced techniques such as creating custom controls and components, creating ASP. NET MVC applications, and working with the HTTP runtime within the .NET framework.

101912.1   Western Political Philosophy

Credit Points 10 **Level** 2

Equivalent Units

63286 - The Western Philosophical Tradition, 101294 - The Western Philosophical Tradition

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

The major social and political philosophy of the West, from the 5th century BC Greece till the 18th century will be examined. The development of ideas of citizenship, subjectivity, freedom, equality and the democratic state will be explored. The influence of Christianity will also be a major theme. Authors will include: Plato, Aristotle, Augustine, Aquinas, More, Hobbes, Locke, Vico, Rousseau.

101010.3   What is the Human?

Credit Points 10 **Level** 3

Equivalent Units

SS216A - What is the Human?

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines theories of human nature from a variety of historical and disciplinary perspectives. It engages with, and encourages the student to evaluate, conceptions of the human - some of which have had wide currency in the broader culture and some which have not. The unit also engages the idea of whether a unified conception of human nature is tenable at all.

101762.1   Who do you think you are? (Day Mode)

Credit Points 10 **Level** 1

Corequisite

101751.2 Contextualising Indigenous Australia (Day Mode)

....

This unit is available to all Undergraduate students who have open electives. Who do you think you are? will provide students practice in the analysis of historical documents, family narratives, autobiography, political and social issues around a project that will give a context for their own personal story. Students will develop skills in oral history work, locating and retrieving archival documents and compiling their own 'family tree'. Students will also develop skills in practising speaking and writing genre appropriate to their own family history. An introduction to the theory of identity and identification will enable students to appreciate the complexities of becoming.

300813.1   Wildlife Studies

Credit Points 10 **Level** 1

Equivalent Units

300425 - Introduction to Wildlife Studies

Special Requirements

Students are required to wear closed-in shoes, long pants and long-sleeved shirts in this unit.

....

This unit involves the study of basic biology, ecology, conservation and management of selected wildlife. Students will learn different management systems and research methods used in the conservation and management of wildlife. The use of wildlife as a sustainable resource will also be analysed within the context of ecological sustainable development and animal ethics.

300952.1   Wireless and Mobile Networks

Credit Points 10 **Level** 3

Prerequisite

300565.2 Computer Networking

Equivalent Units

300088 - Broadband Networking

....

This unit helps the students gain in depth knowledge in the core concepts and principles in the areas of wireless and cellular networks. It provides them with the technical skills needed to do requirement analysis and evaluate a range of wireless networked systems to plan their institution or expansion. The unit covers the communication characteristics and architecture of wireless systems along with various types of wireless networks, including wireless LANs, personal area networks, sensor networks, mesh networks, and broadband wireless networks. Given the widespread use of mobile phones and devices, a substantial part of the unit is devoted to the study of cellular networks. The unit also covers mobility management and wireless security issues and solutions. Upon completion of

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 486

this unit, the students will have the capabilities needed for long term and independent learning in the rapidly evolving area of wireless and mobile networking.

300065.4   Wireless Communications

Credit Points 10 **Level** 4

Assumed Knowledge

Students should have a good understanding of signals and systems, probability and random processes and fundamentals of communication systems.

Prerequisite

200242.3 Mathematics for Engineers 3 AND **300007.2** Communication Systems OR **300010.3** Data Networks

Equivalent Units

300017 - Digital Communication Engineering

....

The unit covers the analysis, design and operation of modern wireless communication systems. The primary focus is on the physical layer and hardware, emphasizing the fundamentals of coding and modulation, spread spectrum and multiple access techniques. Current wireless architectures and mobile communication systems are also covered.

101879.2   Women with Muslim Identity

Credit Points 10 **Level** 2

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

An exploration of perceptions of Muslim women and of the meaning and significance of Muslim identity for women today. Students will analyse ways in which Muslim women perceive themselves and are perceived by others in the context of contemporary Islamic revivalism, focussing on differences and relationships among various outsider's and insider's perceptions. A central focus will be the resurgence of the veil in the context of contemporary Islamic revivalism; Students will explore the meanings of veiling in the context of discussions and debates on the role of women, equality and freedom, cultural diversity, religious values and secularity.

101977.1   Women, Travel and Empire

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit enables students to analyse nineteenth-century travel writing within an imperialist context and to interrogate race, gender and subjectivity. We will examine the role of travel writing in the construction of Imperial politics and we will explore how and in what ways female travel writers either participated in or challenged the convention of the British Imperial subject. We will also consider wider issues such as the developments in visual culture, developments

in archaeology and anthropology, the changing political landscapes and developments in leisure, technology and tourism.

102374.1   Women's Writing

Credit Points 10 **Level** 3

Special Requirements

Successful complete of 60 credit points in currently enrolled course.

....

This unit focuses on the study of women's writing from a broad social and cultural context. While the women writers will change from offering to offering, the content will remain centred on feminist theory and discourses of race, ethnicity, class and gender. The unit will draw on a variety of genres including drama, fiction, poetry, essay and short story. Students will explore women's concerns about motherhood, marriage, violence and domesticity; cultural identity, vocation and the body as (sexual) object. They will also explore women's experiences of madness and victimisation; segregation and alienation; power/lessness and the public sphere.

102257.1   Word (Literary Traditions)

Credit Points 10 **Level** 7

Equivalent Units

101835 - Word

Special Requirements

Students must be enrolled in 1797 or 1831 Master of Arts in Literature and Creative Writing.

....

This unit will consider the nature of writing in terms of both writing and editorial practice. It will involve the analysis of major works by writers (both of fiction and non-fiction) within particular traditions and communities and reflect on the themes of these works and the processes through which they emerge. It will explore the power of the word to shape our understanding of the world. This reflection will be both theoretical and practical.

400904.1   Work Experience in Sport and Exercise Science

Credit Points 10 **Level** 3

Prerequisite

400885.1 Sport and Exercise Physiology AND **400887.1** Clinical Exercise Physiology 1 AND **400902.1** Exercise in Musculo-Skeletal Rehabilitation AND **400903.1** Professional Development and Work Experience

Equivalent Units

400331 - Sport and Exercise Science in Practice

Special Requirements

Students must be enrolled in 4658 Bachelor of Health Science (Sport and Exercise Science). Students must comply with the following special requirements: Prior to enrolling in this unit students must have: 1) submitted a Criminal Record Check form prior to 1 June 2010 or a Student Undertaking Form after 1 June 2010 and have

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 487

applied for a National Police Certificate 2) submitted a Prohibited Employment Declaration prior to 1 June 2010 or a Working with Children Check Student Declaration after 1 June 2010 3) provide evidence of compliance with the occupational screening and immunisation policy of NSW Health 4) possess a current WorkCover Authority approved First Aid Certificate.

....

Experience in the field of study is an essential ingredient in marketing an individual for employment and often for professional memberships. Work Experience in Sport and Exercise Science provides students with an opportunity to observe and assist Sport & Exercise Science practitioners in action and to learn in a practical setting. Students will have the opportunity to see how knowledge and skills acquired in lectures and tutorials/laboratories can be applied and also relate theoretical concepts and skills to situations in exercise-related settings. This unit is the second of two units that require a work placement which is usually off campus.

200914.1   Working in Professions

Credit Points   10 **Level**   2

Equivalent Units

200376 - Managing and Developing Careers, 200915 - The Service Enterprise

Special Requirements

Successful completion of 60 credit points.

....

Working in Professions focuses on developing career understandings and appreciating the personal attributes required for employability in the 'real world' of accounting, banking, economics, finance and property. This is a professional unit in the Bachelor of Business, but is also open to participants with an interest in examining and developing their knowledge of employability in these career areas. The unit involves examination of the evolving nature of work in a dynamic globalised context; applied labour market and industry structure analysis; and an exploration of employability attributes, capacities and opportunities across a range of career paths. Successful completion of the unit allows participants to gauge employer expectations, and to identify and reflect on career opportunities in their chosen fields.

400246.4   Workplace Learning 1 (Therapeutic Recreation)

Credit Points   10 **Level**   2

Prerequisite

400783.2 Professional Pathways in Health Science

Special Requirements

Students must be enrolled in the Bachelor of Health Science- Therapeutic Recreation program. Prior to enrolling in this unit students must have: 1) Submitted a National Criminal Record Check form 2) Submitted a Working with Children Check Student Declaration 3) A senior first aid certificate which includes cardiopulmonary resuscitation. 4) All documentation to comply with the NSW Health Occupational Screening and Vaccination Against Infectious

Diseases Policy including completion of an adult vaccination card. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff.

....

This unit provides students with the opportunity to apply theoretical and practical knowledge and skills gained in the course to develop their practice and professional behaviours in a therapeutic recreation workplace setting. The unit develops skills for students in working with individuals in a therapeutic recreation program that include assessment, planning, programming and evaluation.

400252.3   Workplace Learning 2 (Community Placement)

Credit Points   10 **Level**   3

Prerequisite

400246.3 Workplace Learning 1 (Therapeutic Recreation)

Special Requirements

1) Submission of a National Police Certificate form. 2) Submission of a Working with Children Check. 3) A senior first aid certificate which includes cardiopulmonary resuscitation. 4) All documentation to comply with the NSW Health Occupational Screening and Vaccination Against Infectious Diseases Policy including completion of an adult vaccination card. To meet NSW health requirements for clinical placements, students will be required to attend a 'bulk compliance' appointment to have their special requirements verified by NSW Health staff.

....

This unit provides students with the opportunity to experience the practice of therapeutic recreation in the workplace through a supervised placement experience with industry. Students will complete practice hours in accordance with the National Diversional Therapy Association requirements. Students will develop skills in client assessment, problem identification, program planning, implementation and evaluation in a range of therapeutic service settings. Students will develop learning contracts and explore the advocacy and support needs of the clients.

102258.1   World (Art and Nature)

Credit Points   10 **Level**   7

Equivalent Units

101836 - World

Special Requirements

Students must be enrolled in 1797 or 1831 Master of Arts in Literature and Creative Writing.

....

This unit will consider elements of the physical world around us: the phenomena we inhabit which form our sense of self. Focusing on literature and how meaning is created in literary form the unit will consider the interaction between the created world and the real world. It will engage with ideas from science, phenomenology, and literary theory in considering particular aspects of both our

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 488

interaction with nature, and how it shapes us, and the manner in which we shape and force ourselves upon nature. A specific theme related to this interaction between the world and our worlds will be addressed.

101668.1   World Cinema

Credit Points 10 **Level** 3

....

This unit surveys contemporary world cinema in a range of languages in order to address a range of linguistic and cultural issues, including the role of subtitling and dubbing in cross-cultural communication. The unit allows students majoring in a Language other than English to enrol in a language specific tutorial (Arabic, Chinese, Italian, Japanese or Spanish) and other students to enrol in a tutorial conducted in English.

101669.3   World Literature in Translation

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit examines representative works of world literature written in languages other than English in order to address a range of literary and cultural issues, including the role of translation in crosscultural communication.

101908.1   Writing and Reading Sci Fi and Fantasy

Credit Points 10 **Level** 3

Assumed Knowledge

Good standard of written english expression

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit covers the basic creative writing techniques for 'worldbuilding' in the genres of science fiction and fantasy. Through guided reading and writing you'll explore what happens when ordinary human predicaments are deepened and complicated when represented as happening in a world not our own: one with different physical laws, belief systems, technologies and cultural practices. In a workshopping environment, you will build outward from a 'story-bud' about an alternative or alien world to explore the logic of that world and its implications for the creation of believable characters, setting, action and - overall - the development of a successful story.

101670.3   Writing and Society

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit explores the social dimensions of literature, both generally, by considering the role played by tradition, authorship, genre and style in the literary exploration of values, and in specific terms, through a close examination of works which have had an important social impact in their time, including those in translation, from a range of contemporary literatures. The lecturers are members of the Writing and Society Research Group, many of whom are practising authors.

100896.3   Writing Fiction

Credit Points 10 **Level** 2

Equivalent Units

CT207A - Creative Writing, B2652 - Writing Fiction

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

In this unit students explore, critically examine and write in a range of fictional forms. They critique a wide variety of published fiction in order to enhance their understanding of approaches, possibilities and techniques, thereby developing a greater capacity to write and critically evaluate their own work. Students create their own fiction in the form of written exercises and assignments, which they will have the opportunity to workshop in a supportive critical environment.

100895.4   Writing For Performance

Credit Points 10 **Level** 3

Equivalent Units

B3654 - Writing for Performance, 100297 - Writing for Screen and Stage

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

In this unit students will consider the history and theory of a selection of performance traditions including Greek tragedy, Elizabethan and Jacobean and modern drama and post-modern performance and write scripts for one or a number of media, including screen (film and television), dramatic theatre, performance poetry and song lyrics and contemporary performance.

101011.3   Writing Poetry

Credit Points 10 **Level** 3

Equivalent Units

B2653 - Writing Poetry

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

What does a poem look or sound like today? In this unit students examine poetic forms, styles and techniques from

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 489

various cultures of the 20th and 21st centuries. Students are taught to analyse and write poetry via a series of guided workshop exercises. They learn that writing poetry also involves becoming a skilled reader of and about poetry. Students enrich their knowledge and love of poems by scrutinising a range of poetic types and methods including imagism, metaphor, free verse, humour, spoken word traditions, song-writing, ecological poetries, and visual and digital poetries. No previous experience in poetry writing is necessary.

100582.2 Writing Portfolio

Credit Points 10 **Level** 3

....

Western Sydney is home to indigenous and migrant communities which makes it culturally and linguistically diverse. This practice-based unit will enable students to develop a portfolio of written work in a variety of creative genres from a bicultural writer's perspective. Students will gain conceptual tools to engage with bicultural writers' texts, discuss and critically evaluate the relationship between theory and writing in a transcultural context, and reflect on their own bicultural experience though creative writing in the English language. The unit allows students from all backgrounds to connect with indigenous and immigrant communities through creative writing.

101830.2 WWII in Asia and the Pacific

Credit Points 10 **Level** 3

Special Requirements

Successful completion of 60 credit points of study in currently enrolled course.

....

This unit provides inquiry into the origins, course, and aftermath of WWII in Asia and the Pacific. We will ask why Japan and China went to war with each other in the 1930s; we will also seek understanding of why and how that war came to include the United States, Britain, the Soviet Union, the Netherlands, Australia, New Zealand, and practically all of Asia. We will examine the atomic attacks against Hiroshima and Nagasaki: Was the bomb a necessary evil? Or could/should the US have avoided using the bomb? We will also look intensively at post-WWII Asia. How did two wartime allies - the US and the Soviet Union - become bitter enemies within months of the war's end? Why did China descend into civil war? What was the war in Korea all about? Were wars of independence throughout SE Asia unavoidable? How was it that Japan escaped much of this postwar misery?

101662.1 Young People, Their Futures and Education

Credit Points 10 **Level** 3

....

Young People, Their Futures and Education is situated within the broad theoretical framework of youth studies. This unit addresses a number of key issues concerning the education of young people from adolescence to early adulthood. Alternative theories and approaches to instructing, motivating and engaging young people are

explored. Identity issues relating to various sections of the youth population are also examined. Emphasis is placed on providing future educators with practical skills and functional knowledge to enhance the experiences of young people.

100298.3 Youth Cultures and Moral Panics

Credit Points 10 **Level** 2

Assumed Knowledge

Satisfactory understanding of key issues and concepts of first year core units.

Special Requirements

Successful completion of 40 credit points of study in currently enrolled course.

....

Young people have long been the focus of social fears. Public figures regularly express concern about the disorder created by unruly youths, or the effects of change on young people. This is the case in relation to popular music, 'youth gangs', new technologies and other areas. This unit will consider how young people became defined as a problem by politicians, policy, the media and others. Resulting 'moral panics' represent social anxieties around economic, social and technological change, producing calls for 'solutions' which often entail repressive laws or policing. Students will examine a range of case studies from Australia and elsewhere.

Western Sydney University Undergraduate Handbook , 2016
Health and Science Schools - Undergraduate
This file was created on 2/05/2016 8:58:42 AM. Please check the online handbook for changes made after this date.

Page 490

Index for courses by course code order

Index for courses by course description order

Index for unit sets by unit sets code order

Index

Index for unit sets by unit set description order

Index

Index for units by unit code order

Index

Index

Index

Index for units by unit description order

Index

Index