

DIPLOMA IN SCIENCE/ BACHELOR OF MEDICAL SCIENCE (6042)

Approved Abbreviation: DipSc/BMedSc
Western Sydney University Program Code: 6042
AQF Level: 7

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CRICOS Code: 096966G

Program Status:

This program applies to students who commenced in Term 1, 2022 or later.

Students should follow the program structure for the session start date relevant to the year they commenced.

For Commencement Year 2020 to 2021 - Please refer to 6042.1
Diploma in Science/Bachelor of Medical Science (<http://handbook.westernsydney.edu.au/hbook/course.aspx?course=6042.1>)

This degree will provide opportunities to learn about the sciences underpinning human health, and their application to disease. The degree has the choice of three primary majors: biomedical science, medicinal chemistry or anatomy and physiology. Students need note that different majors and minors are offered on different campuses. Graduates may 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, allied health companies and various research and quality control laboratories, as well as further study including research degrees, and graduate medicine degrees.

The first year of this program is delivered by Western Sydney University The College as an agent of Western Sydney University via extended face-to-face hours in smaller learning environments. A Diploma in Science exit point is also available at the end of the first year of the program.

For more information on Western Sydney University, The College, please refer to their web site.

Western Sydney University, The College (<https://www.westernsydney.edu.au/future/study/application-pathways/the-college.html>)

Early Exit

Students may exit this program on completion of 90 credit points with a 7084 Diploma in Science (exit only) (<https://hbook.westernsydney.edu.au/archives/2023-2024/programs/diploma-science/>)

Study Mode

Three years full-time or six years part-time

Program Advice

For program advice during your first year of study, please contact The College: College Program Enquiries (<https://directory.westernsydney.edu.au/search/email/AdminApp@westernsydney.edu.au>)

For program advice during your second and subsequent years, please contact science@westernsydney.edu.au

Prospective students should visit the following websites for general enquiries about this program.

Enquire about this program (<https://enquiry.westernsydney.edu.au/courseenquiry/>) | Local Admission (<https://www.westernsydney.edu.au/future/>) | International Admission (<https://www.westernsydney.edu.au/international/home/apply/admissions/>) |

Location

Campus	Attendance	Mode	Advice
The College - Nirimba Education Precinct ¹	Full Time	Internal	See above
Campbelltown Campus ²	Full Time	Internal	See above
Campbelltown Campus	Part Time	Internal	See above
Hawkesbury Campus ²	Full Time	Internal	See above
Hawkesbury Campus	Part Time	Internal	See above
Parramatta Campus - Victoria Road ²	Full Time	Internal	See above
Parramatta Campus - Victoria Road	Part Time	Internal	See above

¹ Students will study at WSU The College Nirimba campus in their first year of study.

² From second year onwards, students will study at either Campbelltown, Hawkesbury or Parramatta (Victoria Rd) campus.

Work Integrated Learning

Western Sydney University seeks to enhance student learning experiences by enabling students to engage in the culture, expectations and practices of their profession or discipline. This program includes a placement or other community-based unpaid practical experience.

There is a mandatory work component required for completion of this program. Please contact the Program Advisor listed above for information.

International students should also refer to the link below for more information and a link to the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS).

Work Integrated Learning (WIL) for international students (https://www.westernsydney.edu.au/currentstudents/current_students/services_and_facilities/international_student_support/working_in_australia/work_integrated_learning/)

Work integrated learning is a component of many Subjects in the core of the program and testamur majors. Students must study to a specific work integrated learning subject, Complex Case Studies in Science. This unit is designed to provide students with opportunities for personal development, industry and civic engagement and to develop career readiness. The subject assures that students can critically analyse and logically argue complex scientific issues whilst taking into account multiple competing perspectives and builds on employability and communication skills developed in earlier units.

Admission

For more information on applying please see link to The College admission pages below.

https://www.westernsydney.edu.au/thecollege/how_to_apply (https://www.westernsydney.edu.au/thecollege/how_to_apply/)

Domestic students are required to have:

- Completed an English subject in the NSW Higher School Certificate, **or**
- Competency in English at IELTS academic 6.0 equivalent (unless a native speaker) **or**
- Passed The College English test with 70% or higher **or**
- Passed The College Foundation Studies Academic English subject at C grade level or higher.

Students are also assumed to have completed some study in Mathematics and Science at a senior high school level or equivalent.

Met other entry requirements such as:

- An ATAR identified prior to the offer of a place, **or**
- Completed The College Foundation Studies program 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 College EAP 4 program with a 50% pass **or**
- Passed The College English test at IELTS academic 6.0 equivalent **or**
- Passed The College Foundation Studies Academic English subject 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 College Foundation Studies program with a Grade Point Average of 5.5 or higher.

Program Structure

Qualification for this award requires the completion of 250 credit points which includes:

90 credit points of core subjects, 80 credit points taken as a Science major and 80 credit points of elective subjects.

Students must complete at least 60 credit points at Level 3 or above.

To meet this requirement, students must select at least 10 credit points of elective study at Level 3.

Year One - College Subjects

Standard 3 term (90 credit points)

Subject	Title	Credit Points
Preparatory Subject		
CHEM 0001	Chemistry (WSTC Prep)	10
University Level Subjects		
BIOS 1014	Cell Biology (WSTC)	10

CHEM 1013	Essential Chemistry (WSTC)	10
NATS 1020	Scientific Literacy (WSTC)	10
BIOS 1003	Biodiversity (WSTC)	10
CHEM 1009	Introductory Chemistry (WSTC)	10
NATS 1029	Human Anatomy and Physiology 1 (WSTC)	10
Select one of the following:		10
MATH 1027	Quantitative Thinking (WSTC)	
MATH 1004	Biometry (WSTC)	
Select one of the following:		10
NATS 1030	Human Anatomy and Physiology 2 (WSTC)	
PROC 1007	Introduction to Food Science (WSTC)	
Total Credit Points		90

Students may exit at this point and graduate with the Diploma in Science following a passing grade in all of the above subjects. Students who progress to Year Two may also be awarded the Diploma if they gain a passing grade in all of the above subjects.

Students must pass all College Preparatory subjects before progressing to the Year Two subjects.

Students must pass at least 70 credit points of University level subjects in Year One before progressing to the Year Two subjects.

Years 2 and 3

Western Sydney University Subjects

For course advice during your second and subsequent years of study, please use the contact listed for the Bachelor of Medical Science (<https://hbook.westernsydney.edu.au/archives/2023-2024/programs/bachelor-medical-science/>)

Core Subjects

Subject	Title	Credit Points
Select one of the following:		10
MATH 2001	Advanced Calculus	
BIOS 2042	Biochemistry	
NATS 2019	Forensic and Environmental Analysis	
NATS 2042	Science Research Methods	
CHEM 2001	Analytical Chemistry	
PUBH 2010	Epidemiology	
Select one of the following:		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals (only available to students in MT3031 Environmental Health)	
Select one of the following:		10
NATS 3027	Laboratory Quality Management	
NATS 3015	Field Project 1	
BIOS 3012	Conservation Biology	
NATS 3040	Topics in Medical Science	
Total Credit Points		30

Majors

Students are required to complete eight specialisation units from one of the following testamur majors:

Anatomy and Physiology, Testamur Major (T084) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/anatomy-physiology-ug-testamur-major/>)

Biomedical Science, Testamur Major (T086) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/biomedical-science-ug-testamur-major/>)

Human Nutrition, Testamur Major (T125) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/human-nutrition-ug-testamur-major/>)

Students may complete a second testamur major chosen from the list below:

Agrifood, Testamur Major (T123) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/agrifood-ug-testamur-major/>)

Anatomy and Physiology, Testamur Major (T084) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/anatomy-physiology-ug-testamur-major/>)

Animal Science, Testamur Major (T054) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/animal-science-ug-testamur-major/>)

Applied Physics, Testamur Major (T078) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/applied-physics-ug-testamur-major/>)

Biology, Testamur Major (T053) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/biology-ug-testamur-major/>)

Biomedical Science, Testamur Major (T086) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/biomedical-science-ug-testamur-major/>)

Chemistry, Testamur Major (T026) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/chemistry-ug-testamur-major/>)

Human Nutrition, Testamur Major (T125) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/human-nutrition-ug-testamur-major/>)

Innovative Foods, Testamur Major (T124) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/innovative-foods-ug-testamur-major/>)

Sustainable Environmental Futures, Testamur Major (T120) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/sustainable-environmental-futures-ug-testamur-major/>)

Zoology, Testamur Major (T029) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/zoology-ug-testamur-major/>)

NOTE: Students must seek advice from their Academic Program Advisor before selecting a second testamur major (or major) to ensure course requirements are met.

Elective Subjects

Students may use their flexible subjects to complete a second major (80 credit points) or one or more minors (40 credit points each) from the same or another discipline area, or up to 80 credit points from the wide range of subjects offered by Western Sydney University.

Suggested minors:

Environmental Health, Minor (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/environmental-health-minor/>)

Infectious Diseases, Minor (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/infectious-diseases-minor/>)

Microbiology, Minor (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/microbiology-minor/>)

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MATH 2001	Advanced Calculus	
BIOS 2042	Biochemistry	
NATS 2019	Forensic and Environmental Analysis	
NATS 2042	Science Research Methods	
CHEM 2001	Analytical Chemistry	
PUBH 2010	Epidemiology	
And the following:		
NATS 3044	Complex Case Studies in Science	10

NATS 3055	Practicum 1	10
Total Credit Points		30

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Zoology, Testamur Major (T029) (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/zoology-ug-testamur-major/>)

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Microbiology, Minor (<https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/microbiology-minor/>)