BACHELOR OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (3639)

Approved Abbreviation: BICT
Western Sydney University Program Code: 3639
AQF Level: 7

CRICOS Code: 064013K

This program applies to students who commenced in 2016 or later.

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

For Commencement Year 2014, please refer to: 3639.3 Bachelor of Information and Communications Technology (http://handbook.uws.edu.au/hbook/course.aspx?course=3639.3)

For Commencement Year 2009 to Autumn 2013, please refer to: 3639.1 Bachelor of Information and Communications Technology (http://handbook.uws.edu.au/hbook/course.aspx?course=3639.1)

 The Bachelor of Information and Communications Technology is a three-year program accredited by the Australian Computer Society. It meets the demands of business to be competitive and to innovate in this fast-changing area. Students build strong foundational skills, and then apply these to a range of industry relevant problems and projects as part of work-integrated learning. To complete the degree, students do a major to specialise in topics, such as, cyber security, cloud computing, multimedia computing. Students also have options to do a minor. This is a challenging and rewarding degree with an ever-expanding range of employment options.

NB: Majors / minors may not be offered on all campuses.

Study Mode

Three years full-time. Six years part-time.

Program Advice

Program Advice (CDMS@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
Campbelltown Campus	Full Time	Internal	See above
Parramatta Campus - Victoria Road	Full Time	Internal	See above
Penrith Campus	Full Time	Internal	See above
Sydney City Campus*	Full Time	Internal	Antoinette Cevenini (https://directory.westernsydney.edu.old/srchprocess_handbook.php?a_value=a.cevenini@city.we
Surabaya Campus Indonesia	Full time	Internal	See above

* Programs delivered through an agreement with another party

Accreditation

On completion of this Program graduates will be eligible for professional membership of the Australian Computer Society. Australian Computer Society accreditation for the Surabaya Campus offering will be sought.

Work Integrated Learning

There is an optional work component available in this program. Please contact the Program Advisor listed above for information.

International students should be aware that if an elective is a requirement of the program but the work itself was not registered with CRICOS, students can still complete these electives but it would be counted towards the work limitation. For more details, refer to the 'Work Integrated Learning (WIL) for international students' website.

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/)

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/)

The Bachelor of Information and Communications Technology includes a final year 'capstone' subject, *Professional Experience*. This provides opportunities for students to gain hands-on experience in software systems requirements 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 provided the project. Suitable projects are sourced from external organisations or within Western Sydney University by way of giving the students professional experience in independent learning and reflective practice.

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 may be made via the Universities Admissions Centre (UAC) or directly through the Western Portal. Use the links below

to apply via UAC or Western Sydney University. Applications made directly to Western Sydney do not have an application fee.

http://www.uac.edu.au/
https://westernsydney.uac.edu.au/ws/

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local 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 students currently completing an Australian Year 12 in or outside Australia, an International Baccalaureate in Australia or a New Zealand National Certificate of Educational Achievement (NCEA) level 3 must apply via UAC International.

http://www.uac.edu.au/

All other International applicants must apply directly to the 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.

International Office (http://www.westernsydney.edu.au/international/)

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.

Sequence Current

This sequence applies to students who commenced Spring 2023 or later.

If you commenced in Autumn 2023 please refer to the Autumn 2023 Sequence tab for details. If you commenced prior to 2023 please refer to the Sequence 2022 tab for details.

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

Recommended Sequence - Sydney City Campus

Click here for the recommended sequence at Sydney City Campus (https://www.westernsydney.edu.au/city/courses/undergraduate/information_and_communications_technology/).

Recommended Sequence - Campbelltown, Parramatta and Penrith Campuses
Full-time start-year intake

Course	Title	Credit Points
Year 1		
Autumn session		
COMP 1005	Programming Fundamentals	10
INFO 1003	Professional Practice, Communication and Ethics	10
HUMN 1013	Contextualising Indigenous Australia (Day Mode)	10
Select one of the following		10
MATH 1038	Mathematics for Computing	

Course	Title	Credit Points
MATH 1006	Discrete Mathematics	
	Credit Points	**40**
Spring session		
COMP 2004	Computer Networking	10
COMP 2021	Software Engineering Fundamentals	10
INFS 2001	Database Design and Development	10
COMP 2015	Programming Techniques	10
	Credit Points	**40**
Year 2		
Autumn session		
COMP 2027	Cyber Security	10
Select two major subjects		20
Select one elective		10
	Credit Points	**40**
Spring session		
COMP 3028	Software Construction	10
INFO 3019	Project Management	10
Select two major subjects		20
	Credit Points	**40**
Year 3		
Autumn session		
Select two major subjects		20
Select two electives		20
	Credit Points	**40**
Spring session		
COMP 3018	Professional Experience	10
Select two major subjects		20
Select one elective		10
	Credit Points	**40**
	Total Credit Points	**240**

Full-time mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
COMP 2004	Computer Networking	10
INFS 2001	Database Design and Development	10
COMP 1005	Programming Fundamentals	10
Select one elective		10
	Credit Points	**40**
Autumn session		
INFO 1003	Professional Practice, Communication and Ethics	10
HUMN 1013	Contextualising Indigenous Australia (Day Mode)	10
COMP 2021	Software Engineering Fundamentals	10
Select one of the following		10
MATH 1038	Mathematics for Computing	
MATH 1006	Discrete Mathematics	
	Credit Points	**40**
Year 2		
Spring session		
COMP 3028	Software Construction	10
COMP 2015	Programming Techniques	10

Course	Title	Credit Points
	Select two major subjects	20
	Credit Points	**40**
Autumn session		
COMP 2027	Cyber Security	10
	Select two major subjects	20
	Select one elective	10
	Credit Points	**40**
Year 3		
Spring session		
INFO 3019	Project Management	10
	Select two major subjects	20
	Select one elective	10
	Credit Points	**40**
Autumn session		
COMP 3018	Professional Experience	10
	Select two major subjects	20
	Select one elective	10
	Credit Points	**40**
	Total Credit Points	**240**

Electives

Please note: elective spaces can be used to complete a Minor.

Major or minor subjects can be used in the elective spaces.

Recommended Sequence - Surabaya Campus, Indonesia - 2024 Students
Surabaya Campus Indonesia

Course	Title	Credit Points
Year 1		
Semester 1		
COMP 2004	Computer Networking	10
MATH 1038	Mathematics for Computing	10
INFS 2001	Database Design and Development	10
COMP 1005	Programming Fundamentals	10
CULT 1030	Pancasila	5
Semester 2		
COMP 2021	Software Engineering Fundamentals	10
INFO 1003	Professional Practice, Communication and Ethics	10
MATH 1006	Discrete Mathematics	10
CULT 1031	Civic Education	5
	Credit Points	**80**
Year 2		
Semester 3		
COMP 3028	Software Construction	10
COMP 2015	Programming Techniques	10
COMP 2008	Computer Organisation	10
INFO 3015	Internet of Things and Smart Environments	10
LANG 1036	Indonesian Language	5
Semester 4		
COMP 2027	Cyber Security	10
COMP 2009	Data Structures and Algorithms	10
COMP 3012	Introduction to Cloud Computing	10
INFO 3003	Human-Computer Interaction	10
PHIL 1008	Religion	5
	Credit Points	**90**
Year 3		
Semester 5		
INFO 3019	Project Management	10
COMP 3013	Mobile Applications Development	10
COMP 3036	Full Stack Development	10
INFO 3018	Computing Practicum	10
Semester 6		
COMP 3018	Professional Experience	10
COMP 3015	Operating Systems Programming	10
COMP 2023	Mathematical Programming	10
	Credit Points	**70**
	Total Credit Points	**240**

Recommended Sequence - Surabaya Campus, Indonesia - 2025 Students
Surabaya Campus Indonesia

Course	Title	Credit Points
Year 1		
Semester 1		
MATH 1038	Mathematics for Computing	10
COMP 1005	Programming Fundamentals	10
INFS 2001	Database Design and Development	10
LANG 1036	Indonesian Language	5
CULT 1030	Pancasila	5
Semester 2		
MATH 1006	Discrete Mathematics	10
COMP 2004	Computer Networking	10
INFO 1003	Professional Practice, Communication and Ethics	10
PHIL 1008	Religion	5
CULT 1031	Civic Education	5
	Credit Points	**80**
Year 2		
Semester 3		
COMP 2021	Software Engineering Fundamentals	10
COMP 2015	Programming Techniques	10
INFO 3015	Internet of Things and Smart Environments	10
COMP 2008	Computer Organisation	10
Semester 4		
COMP 3012	Introduction to Cloud Computing	10
COMP 2009	Data Structures and Algorithms	10
COMP 2027	Cyber Security	10
COMP 3028	Software Construction	10
	Credit Points	**80**
Year 3		
Semester 5		
INFO 3018	Computing Practicum	10
INFO 3003	Human-Computer Interaction	10
INFO 3019	Project Management	10
COMP 3013	Mobile Applications Development	10
Semester 6		
COMP 3018	Professional Experience	10

COMP 3023	Systems and Network Management	10
COMP 3015	Operating Systems Programming	10
COMP 3036	Full Stack Development	10
	Credit Points	**80**
	Total Credit Points	**240**

Majors

Cyber Security and Ethical Hacking, Testamur Major (T145) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/cyber-security-ethical-hacking-testamur-major/)

Enterprise Systems and Architectures, Testamur Major (T151) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/enterprise-systems-architectures-ug-testamur-major/)

Health Informatics, Testamur Major (T007) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/health-informatics-pg-testamur-major/)

Multimedia Computing, Testamur Major (T147) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/multimedia-computing-testamur-major-t147/)

Networking and Cloud Computing, Testamur Major (T146) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/networking-cloud-computing-testamur-major-t146/)

Software Development, Testamur Major (T148) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/software-development-testamur-major-t148/)

Minors

It is suggested that students in the Bachelor of Information and Communications Technology who wish to choose a minor should choose from the list of optional minors below.

Cloud Computing, Minor (0128) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/cloud-computing-minor/)

Cyber Security and Ethical Hacking, Minor (0326) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/cyber-security-ethical-hacking-minor/)

Data Science and Machine Learning, Minor (0322) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/data-science-machine-learning-minor/)

Games Development, Minor (0323) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/games-development/)

Graphics and Visual Simulation, Minor (0324) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/graphics-visual-simulation-minor/)

Health Informatics, Minor (0037) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/health-informatics-minor/)

Multimedia Computing, Minor (0328) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/multimedia-computing-minor-0328/)

Networking, Minor (0040) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/networking-minor/)

Software Development, Minor (0329) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/software-development-minor-0329/)

Ubiquitous Computing, Minor (0325) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/ubiquitous-computing/)

Major and Minor elective spaces

Elective subjects may be used toward obtaining an additional approved major (80 credit points) or minor (40 credit points). Western Sydney University offers majors and minors in a range of areas including Sustainability and Indigenous Studies.

Global Sustainability Minor (https://hbook.westernsydney.edu.au/majors-minors/global-sustainability-minor/)
Indigenous Australian Studies Major (https://hbook.westernsydney.edu.au/majors-minors/indigenous-australian-studies-major/)
Indigenous Australian Studies Minor (https://hbook.westernsydney.edu.au/majors-minors/indigenous-australian-studies-minor/)

Western Sydney University also offers the following innovative transdisciplinary Challenge Minors (https://www.westernsydney.edu.au/educational_partnerships_and_quality/home/challenge_minors/) which we encourage those students who have elective space to consider.

Equitable Technologies (https://hbook.westernsydney.edu.au/majors-minors/equitable-technologies-minor/)
Urban Evolution (https://hbook.westernsydney.edu.au/majors-minors/urban-evolution-minor/)
Migration and Global Change (https://hbook.westernsydney.edu.au/majors-minors/migration-global-change-minor/)
Personal Innovation (https://hbook.westernsydney.edu.au/majors-minors/personal-innovation-minor/)
Innovating, Creating and Problem Solving (https://hbook.westernsydney.edu.au/majors-minors/innovating-creating-problem-solving-minor/)
Eco-Socially Conscious Design and Manufacturing (https://hbook.westernsydney.edu.au/majors-minors/eco-socially-conscious-design-manufacturing-minor/)
Water for Life (https://hbook.westernsydney.edu.au/majors-minors/water-life-minor/)
Climate Justice (https://hbook.westernsydney.edu.au/majors-minors/climate-justice-minor/)
Creative and Visual Communication (https://hbook.westernsydney.edu.au/majors-minors/creative-visual-communication-minor/)
Global Workplaces (https://hbook.westernsydney.edu.au/majors-minors/global-workplaces-minor/)
Innovating For Humans (https://hbook.westernsydney.edu.au/majors-minors/innovating-humans-minor/)
Creative Living for Cultural Wellbeing (https://hbook.westernsydney.edu.au/majors-minors/creative-living-cultural-wellbeing-minor-/)
Ideate. Strategise. Innovate. (https://hbook.westernsydney.edu.au/majors-minors/ideate-strategise-innovate-minor/)
Humanising Data (https://hbook.westernsydney.edu.au/majors-minors/humanising-data-minor/)

For more information, visit the Challenge Minor (https://www.westernsydney.edu.au/educational_partnerships_and_quality/home/challenge_minors/) website.

Search for majors and minors (https://hbook.westernsydney.edu.au/majors-minors/)

Students can apply for an elective major or minor via Western Now.

WesternNow (https://www.westernsydney.edu.au/westernnow/)

This sequence applies to students who commenced in Autumn 2023. If you commenced prior to 2023 please refer to the Sequence 2022 tab for details.

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

Recommended Sequence - Sydney City Campus Autumn 2023

Click here for the recommended sequence at Sydney City Campus (https://www.westernsydney.edu.au/city/courses/undergraduate/information_and_communications_technology/).

Recommended Sequence - Campbelltown, Parramatta and Penrith Campuses Autumn 2023

Full-time start-year intake

Course	Title	Credit Points
Year 1		
Autumn session		
COMP 1005	Programming Fundamentals	10
MATH 1038	Mathematics for Computing	10
INFO 1003	Professional Practice, Communication and Ethics	10
HUMN 1013	Contextualising Indigenous Australia (Day Mode)	10
	Credit Points	**40**
Spring session		
COMP 2004	Computer Networking	10
COMP 2021	Software Engineering Fundamentals	10
INFS 2001	Database Design and Development	10
COMP 2015	Programming Techniques	10
	Credit Points	**40**
Year 2		
Autumn session		
COMP 2027	Cyber Security	10
Select two major subjects		20
Select one elective		10
	Credit Points	**40**
Spring session		
COMP 3028	Software Construction	10
INFO 3019	Project Management	10
Select two major subjects		20
	Credit Points	**40**
Year 3		
Autumn session		
Select two major subjects		20
Select two electives		20
	Credit Points	**40**
Spring session		
COMP 3018	Professional Experience	10
Select two major subjects		20
Select one elective		10
	Credit Points	**40**
	Total Credit Points	**240**

Full-time mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
COMP 2004	Computer Networking	10
COMP 2021	Software Engineering Fundamentals	10
INFS 2001	Database Design and Development	10
COMP 1005	Programming Fundamentals	10
	Credit Points	**40**
Autumn session		
MATH 1038	Mathematics for Computing	10
INFO 1003	Professional Practice, Communication and Ethics	10
HUMN 1013	Contextualising Indigenous Australia (Day Mode)	10
Select one elective		10
	Credit Points	**40**
Year 2		
Spring session		
COMP 3028	Software Construction	10
COMP 2015	Programming Techniques	10
Select two major subjects		20
	Credit Points	**40**
Autumn session		
COMP 2027	Cyber Security	10
Select two major subjects		20
Select one elective		10
	Credit Points	**40**
Year 3		
Spring session		
INFO 3019	Project Management	10
Select two major subjects		20
Select one elective		10
	Credit Points	**40**
Autumn session		
COMP 3018	Professional Experience	10
Select two major subjects		20
Select one elective		10
	Credit Points	**40**
	Total Credit Points	**240**

Electives

Please note: elective spaces can be used to complete a Minor.

Major or minor subjects can be used in the elective spaces.

Majors

Cyber Security and Ethical Hacking, Testamur Major (T145) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/cyber-security-ethical-hacking-testamur-major/)

Enterprise Systems and Architectures, Testamur Major (T151) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/enterprise-systems-architectures-ug-testamur-major/)

Health Informatics, Testamur Major (T007) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/health-informatics-pg-testamur-major/)

Multimedia Computing, Testamur Major (T147) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/multimedia-computing-testamur-major-t147/)

Networking and Cloud Computing, Testamur Major (T146) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/networking-cloud-computing-testamur-major-t146/)

Software Development, Testamur Major (T148) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/software-development-testamur-major-t148/)

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Data Science and Machine Learning, Minor (0322) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/data-science-machine-learning-minor/)

Games Development, Minor (0323) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/games-development/)

Graphics and Visual Simulation, Minor (0324) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/graphics-visual-simulation-minor/)

Health Informatics, Minor (0037) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/health-informatics-minor/)

Multimedia Computing, Minor (0328) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/multimedia-computing-minor-0328/)

Networking, Minor (0040) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/networking-minor/)

Software Development, Minor (0329) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/software-development-minor-0329/)

Ubiquitous Computing, Minor (0325) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/ubiquitous-computing/)

Major and Minor elective spaces

Elective subjects may be used toward obtaining an additional approved major (80 credit points) or minor (40 credit points). Western Sydney University offers majors and minors in a range of areas including Sustainability and Indigenous Studies.

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Indigenous Australian Studies Major (https://hbook.westernsydney.edu.au/majors-minors/indigenous-australian-studies-major/)
Indigenous Australian Studies Minor (https://hbook.westernsydney.edu.au/majors-minors/indigenous-australian-studies-minor/)

Western Sydney University also offers the following innovative transdisciplinary Challenge Minors (https://www.westernsydney.edu.au/educational_partnerships_and_quality/home/challenge_minors/) which we encourage those students who have elective space to consider.

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Urban Evolution (https://hbook.westernsydney.edu.au/majors-minors/urban-evolution-minor/)
Migration and Global Change (https://hbook.westernsydney.edu.au/majors-minors/migration-global-change-minor/)
Personal Innovation (https://hbook.westernsydney.edu.au/majors-minors/personal-innovation-minor/)
Innovating, Creating and Problem Solving (https://hbook.westernsydney.edu.au/majors-minors/innovating-creating-problem-solving-minor/)
Eco-Socially Conscious Design and Manufacturing (https://hbook.westernsydney.edu.au/majors-minors/eco-socially-conscious-design-manufacturing-minor/)
Water for Life (https://hbook.westernsydney.edu.au/majors-minors/water-life-minor/)
Climate Justice (https://hbook.westernsydney.edu.au/majors-minors/climate-justice-minor/)
Creative and Visual Communication (https://hbook.westernsydney.edu.au/majors-minors/creative-visual-communication-minor/)
Global Workplaces (https://hbook.westernsydney.edu.au/majors-minors/global-workplaces-minor/)
Innovating For Humans (https://hbook.westernsydney.edu.au/majors-minors/innovating-humans-minor/)
Creative Living for Cultural Wellbeing (https://hbook.westernsydney.edu.au/majors-minors/creative-living-cultural-wellbeing-minor-/)
Ideate. Strategise. Innovate. (https://hbook.westernsydney.edu.au/majors-minors/ideate-strategise-innovate-minor/)
Humanising Data (https://hbook.westernsydney.edu.au/majors-minors/humanising-data-minor/)

For more information, visit the Challenge Minor (https://www.westernsydney.edu.au/educational_partnerships_and_quality/home/challenge_minors/) website.

Search for majors and minors (https://hbook.westernsydney.edu.au/majors-minors/)

Students can apply for an elective major or minor via Western Now.

WesternNow (https://www.westernsydney.edu.au/westernnow/)

If you commenced in 2023 or later please refer to the Sequence 2023 tab for details.

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

Recommended Sequence - Sydney City Campus 2022

Click here for the recommended sequence at Sydney City Campus (https://www.westernsydney.edu.au/city/courses/undergraduate/information_and_communications_technology/).

Recommended Sequence - Campbelltown, Parramatta and Penrith Campuses 2022

Full-time start-year intake

Course	Title	Credit Points
Year 1		
Autumn session		
COMP 1005	Programming Fundamentals	10
COMM 1026	Principles of Professional Communication 1	10
INFS 1006	Systems Analysis and Design	10
MATH 1028	Statistical Decision Making	10
	Credit Points	**40**
Spring session		
COMP 2004	Computer Networking	10
COMP 2015	Programming Techniques	10
INFS 2001	Database Design and Development	10
Select one elective		10
	Credit Points	**40**
Year 2		
Autumn session		
COMP 2020	Technologies for Web Applications	10
COMP 3007	Computer Networks and Internets	10
INFS 2006	Object Oriented Analysis	10
Select one elective		10
	Credit Points	**40**
Spring session		
INFS 3017	Web Systems Development	10
From Spring 2024 students are advised to select COMP 3036		
COMP 3036	Full Stack Development	
COMP 3020	Social Web Analytics	10
Select two electives		20
	Credit Points	**40**
Year 3		
Autumn session		
INFO 3003	Human-Computer Interaction	10
INFO 3008	Professional Development	10
COMP 3015	Operating Systems Programming	10
Select one elective		10
	Credit Points	**40**
Spring session		
COMP 3018	Professional Experience	10
Select three electives		30
	Credit Points	**40**
	Total Credit Points	**240**

Replaced Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in 2023 or earlier.

INFS 3017 Web Systems Development, replaced by COMP 3036 Full Stack Development

Full-time mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
COMP 2004	Computer Networking	10
INFS 2001	Database Design and Development	10
MATH 1030	Statistics for Business	10
Select one elective		10
	Credit Points	**40**
Autumn session		
COMP 1005	Programming Fundamentals	10
INFS 1006	Systems Analysis and Design	10
COMP 3007	Computer Networks and Internets	10
COMM 1026	Principles of Professional Communication 1	10
	Credit Points	**40**
Year 2		
Spring session		
COMP 2015	Programming Techniques	10
COMP 3020	Social Web Analytics	10
Select two electives		20
	Credit Points	**40**
Autumn session		
COMP 2020	Technologies for Web Applications	10
INFO 3008	Professional Development	10
INFS 2006	Object Oriented Analysis	10
INFO 3003	Human-Computer Interaction	10
	Credit Points	**40**
Year 3		
Spring session		
INFS 3017	Web Systems Development	10
From Spring 2024 students are advised to select COMP 3036		
COMP 3036	Full Stack Development	
Select three electives		30
	Credit Points	**40**
Autumn session		
COMP 3018	Professional Experience	10
COMP 3015	Operating Systems Programming	10
Select two electives		20
	Credit Points	**40**
	Total Credit Points	**240**

Replaced Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in 2023 or earlier.

INFS 3017 Web Systems Development, replaced by COMP 3036 Full Stack Development

Start-year 2.5 Year Accelerated Pathway with Summer Session

Course	Title	Credit Points
Year 1		
Autumn session		
COMP 1005	Programming Fundamentals	10

COMM 1026	Principles of Professional Communication 1	10
INFS 1006	Systems Analysis and Design	10
MATH 1028	Statistical Decision Making	10
	Credit Points	**40**
Spring session		
COMP 2015	Programming Techniques	10
COMP 2004	Computer Networking	10
INFS 2001	Database Design and Development	10
Select one elective		10
	Credit Points	**40**
Summer A session		
COMP 2020	Technologies for Web Applications	10
INFO 3003	Human-Computer Interaction	10
	Credit Points	**20**
Year 2		
Autumn session		
COMP 3007	Computer Networks and Internets	10
INFS 2006	Object Oriented Analysis	10
Select two electives		20
	Credit Points	**40**
Spring session		
INFS 3017	Web Systems Development	10
From Spring 2024 students are advised to select COMP 3036		
COMP 3036	Full Stack Development	
COMP 3020	Social Web Analytics	10
Select two electives		20
	Credit Points	**40**
Summer A session		
INFO 3008	Professional Development	10
Select one elective		10
Please note that the choice of elective subject in Summer A session may restrict the choice of major that can be completed.		
	Credit Points	**20**
Year 3		
Autumn session		
COMP 3018	Professional Experience	10
COMP 3015	Operating Systems Programming	10
Select two electives		20
	Credit Points	**40**
	Total Credit Points	**240**

Replaced Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in 2023 or earlier.

INFS 3017 Web Systems Development, replaced by COMP 3036 Full Stack Development

Mid-Year 2.5 Year Accelerated Pathway with Summer Session

Course	Title	Credit Points
Year 1		
Spring session		
COMP 2004	Computer Networking	10
INFS 2001	Database Design and Development	10
MATH 1030	Statistics for Business	10
Select one elective		10
	Credit Points	**40**
Summer A session		
INFS 1006	Systems Analysis and Design	10
INFO 3003	Human-Computer Interaction	10
	Credit Points	**20**
Autumn session		
COMP 1005	Programming Fundamentals	10
COMP 3007	Computer Networks and Internets	10
INFS 2006	Object Oriented Analysis	10
COMM 1026	Principles of Professional Communication 1	10
	Credit Points	**40**
Year 2		
Spring session		
COMP 2015	Programming Techniques	10
COMP 3020	Social Web Analytics	10
Select two electives		20
	Credit Points	**40**
Summer A session		
COMP 2020	Technologies for Web Applications	10
Select one elective		10
Please note that the choice of elective subject in Summer A session may restrict the choice of major that can be completed.		
	Credit Points	**20**
Autumn session		
INFO 3008	Professional Development	10
COMP 3015	Operating Systems Programming	10
Select two electives		20
	Credit Points	**40**
Year 3		
Spring session		
INFS 3017	Web Systems Development	10
From Spring 2024 students are advised to select COMP 3036		
COMP 3036	Full Stack Development	
COMP 3018	Professional Experience	10
Select two electives		20
	Credit Points	**40**
	Total Credit Points	**240**

Replaced Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in 2023 or earlier.

INFS 3017 Web Systems Development, replaced by COMP 3036 Full Stack Development

Elective Majors and Minors

Please note: majors and minors are optional.

Majors

Campbelltown, Parramatta and Penrith Campuses

Cyber Security, Major (0066) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/cyber-security-major/)

Entertainment Computing, Major (0145) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/entertainment-computing-major/)

Health Informatics, Major (0037) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/health-informatics-major/)

Mathematics, Major (0059) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mathematics-major/)

Mobile Computing, Major (0146) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mobile-computing-major/)

Networking, Major (0040) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/networking-major/)

Technology Entrepreneurship, Major (0261) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/technology-entrepreneurship-major/)

Sydney City Campus

Mobile Computing, Major (0146) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mobile-computing-major/)

Networking, Major (0040) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/networking-major/)

Minors
Campbelltown, Parramatta and Penrith Campuses

Astroinformatics, Minor (0096) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/astroinformatics-minor/)

Cloud Computing, Minor (0128) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/cloud-computing-minor/)

Entertainment Computing, Minor (0145) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/entertainment-computing-minor/)

Health Informatics, Minor (0037) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/health-informatics-minor/)

IT Support, Minor (0205) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/it-support-minor/)

Mathematics, Minor (0059) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mathematics-minor/)

Mobile Computing, Minor (0146) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mobile-computing-minor/)

Networking, Minor (0040) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/networking-minor/)

Social Media Analytics, Minor (0147) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/social-media-analytics-minor/)

Systems Security, Minor (0150) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/systems-security-minor/)

Web Application Development (for Computing Students), Minor (0151) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/web-application-development-for-computing-students-minor/)

It is suggested that students in the Bachelor of Information and Communications Technology who wish to choose a major or minor should choose from the list of optional majors and minors above.

The following majors and minors are only available to undergraduate students enrolled in other Western Sydney University programs.

Information Technology

Web Systems Development

Mobile Application Development (for Non-computing Students only)

Web Application Development (for Non-Computing Students)

Major and Minor elective spaces

Elective subjects may be used toward obtaining an additional approved major (80 credit points) or minor (40 credit points). Western Sydney University offers majors and minors in a range of areas including Sustainability and Indigenous Studies.

Global Sustainability Minor (https://hbook.westernsydney.edu.au/majors-minors/global-sustainability-minor/)
Indigenous Australian Studies Major (https://hbook.westernsydney.edu.au/majors-minors/indigenous-australian-studies-major/)
Indigenous Australian Studies Minor (https://hbook.westernsydney.edu.au/majors-minors/indigenous-australian-studies-minor/)

Western Sydney University also offers the following innovative transdisciplinary Challenge Minors (https://www.westernsydney.edu.au/educational_partnerships_and_quality/home/challenge_minors/) which we encourage those students who have elective space to consider.

Equitable Technologies (https://hbook.westernsydney.edu.au/majors-minors/equitable-technologies-minor/)
Urban Evolution (https://hbook.westernsydney.edu.au/majors-minors/urban-evolution-minor/)
Migration and Global Change (https://hbook.westernsydney.edu.au/majors-minors/migration-global-change-minor/)
Personal Innovation (https://hbook.westernsydney.edu.au/majors-minors/personal-innovation-minor/)
Innovating, Creating and Problem Solving (https://hbook.westernsydney.edu.au/majors-minors/innovating-creating-problem-solving-minor/)
Eco-Socially Conscious Design and Manufacturing (https://hbook.westernsydney.edu.au/majors-minors/eco-socially-conscious-design-manufacturing-minor/)
Water for Life (https://hbook.westernsydney.edu.au/majors-minors/water-life-minor/)
Climate Justice (https://hbook.westernsydney.edu.au/majors-minors/climate-justice-minor/)
Creative and Visual Communication (https://hbook.westernsydney.edu.au/majors-minors/creative-visual-communication-minor/)
Global Workplaces (https://hbook.westernsydney.edu.au/majors-minors/global-workplaces-minor/)
Innovating For Humans (https://hbook.westernsydney.edu.au/majors-minors/innovating-humans-minor/)
Creative Living for Cultural Wellbeing (https://hbook.westernsydney.edu.au/majors-minors/creative-living-cultural-wellbeing-minor-/)
Ideate. Strategise. Innovate. (https://hbook.westernsydney.edu.au/majors-minors/ideate-strategise-innovate-minor/)
Humanising Data (https://hbook.westernsydney.edu.au/majors-minors/humanising-data-minor/)

For more information, visit the Challenge Minor (https://www.westernsydney.edu.au/educational_partnerships_and_quality/home/challenge_minors/) website.

Search for majors and minors (https://hbook.westernsydney.edu.au/majors-minors/)

Students can apply for an elective major or minor via Western Now.

WesternNow (https://www.westernsydney.edu.au/westernnow/)

Replaced Majors and Minors

The majors and minors listed below count towards completion of this program for students who began studying these majors and minors prior to the years indicated below.

M3102 Cyber Security, Major (http://handbook.westernsydney.edu.au/hbook/specialisation.aspx?unitset=M3102.1), replaced by Cyber Security, Major in 2018 (listed above).
M3070 Networking, Major (http://handbook.westernsydney.edu.au/hbook/specialisation.aspx?unitset=M3070.1), replaced by Networking, Major in 2017 (listed above).

SM3055 Networking, Minor (http://handbook.westernsydney.edu.au/hbook/specialisation.aspx?unitset=SM3055.1), replaced by Networking, Minor in 2017 (listed above).
SM3089 Statistics, Minor (http://handbook.westernsydney.edu.au/hbook/specialisation.aspx?unitset=SM3089.1), discontinued from 2020