BACHELOR OF MEDICAL SCIENCE (3755)

Approved Abbreviation: BMedSc
Western Sydney University Program Code: 3755
AQF Level: 7

CRICOS Code: 044792K

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

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

For Commencement Year 2017 to 2019 - Please refer to 3673.2 Bachelor of Medical Science (http://handbook.westernsydney.edu.au/hbook/course.aspx?course=3673.2)

For Commencement Year 2020 to 2021 - Please refer to 3755.1 Bachelor of Medical Science (http://handbook.westernsydney.edu.au/hbook/course.aspx?course=3755.1)

This degree will provide you with the opportunity to learn about the basic sciences underpinning human health, wellbeing and its application to human disease. Enrolment in this degree has you selecting from one of three areas as your primary major: Biomedical Science, Human Nutrition or Anatomy and Physiology. The Biomedical Science major focuses on the cellular, molecular and genetic biology aspects of health and disease. The Human Nutrition major uses biology, chemistry and physiology to develop concepts in food and nutrient form and function in relation to human metabolism and physiology, , while the Anatomy and Physiology major focuses on the anatomy and physiology of the human body in relation to health and disease.

All students must complete 60 credit points of study at Level 3 to meet program requirements. Students may need to select at least 10 credit points of flexible study at Level 3 to meet this requirement.

Students need note that different majors and minors are offered on different campuses and not all majors/minors are offered at every campus.

Study Mode

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

Program Advice

Dr Narsimha Reddy - T026 Chemistry, T078 Applied Physics, T120 Sustainable Environmental Futures (https://directory.westernsydney.edu.au/search/name/Narsimha%20Reddy/)

Dr Ryan McQuinn - T029 Zoology (https://directory.westernsydney.edu.au/search/name/Ryan%20McQuinn/)

Dr Christine Hutchison - T053 Biology, T054 Animal Science, T124 Innovative Foods, T125 Human Nutrition (https://directory.westernsydney.edu.au/search/name/Christine%20Hutchison/)

Dr Oliver Morton - T086 Biomedical Science (https://directory.westernsydney.edu.au/search/name/%20Oliver%20Morton/)

Dr Srinivas Nammi - T084 Anatomy and Physiology, T085 Medicinal Chemistry (https://directory.westernsydney.edu.au/search/name/Srinivas%20Nammi/)

Dr Ming Jie Wu - T086 Biomedical Science (https://directory.westernsydney.edu.au/search/name/Ming%20Jie%20Wu/)

Dr Sam Merlin - T084 Anatomy and Physiology (https://directory.westernsydney.edu.au/search/name/Sam%20Merlin/)

Location

Campus	Attendance	Mode	Advice
Campbelltown Campus	Full Time	Internal	See above
Campbelltown Campus	Part Time	Internal	See above
Parramatta Campus - Victoria Road	Full Time	Internal	See above
Parramatta Campus - Victoria Road	Part Time	Internal	See above

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.

Work integrated learning is a component of many subjects in the core of the course and testamur majors.Additionally, students may choose one of two specific work integrated learning subjects.

The first of these, *Complex Case Studies in Science*, is designed to provide students with opportunities for personal development, industry and civic engagement and to develop career readiness. The subject

In the second specific work integrated learning subject, *Work Internship for Science Professionals,* students undertake an industry placement. The placement will allow students to observe and develop professional skills and behaviour and integrate theoretical and practical science knowledge and conventions into a real world setting. Student placements are unpaid and are undertaken in accordance with the requirements of Western Sydney University's Placement Policy (https://policies.westernsydney.edu.au/document/view.current.php?id=308). Students who are in relevant employment may apply for this experience to be recognised for advanced standing purposes. Students should consult the Credit for Prior Learning Policy (https://policies.westernsydney.edu.au/document/view.current.php?id=176).

Admission

Assumed Knowledge: Students should have at least two unit English, and two unit science (any science) and two subject mathematics at year 12 equivalent.

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.

Program Structure

Qualification for this award requires the completion of 240 credit points which includes: 80 credit points of core subjects, 80 credit points taken as a Science specialisation 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 units at Level 3.

Units are generally 10 credit points each unless otherwise indicated.

Early Exit

Students may exit this program on completion of 80 cps with a Diploma in General Science (exit only)

Diploma in General Science (exit only) (https://hbook.westernsydney.edu.au/archives/2022-2023/programs/diploma-general-science-exit-only/)

Core Subjects

Subject	Title	Credit Points
All students are required to complete the following two Subjects:		
NATS 1019	Scientific Literacy	10
CHEM 1008	Introductory Chemistry	10

NOTE: Students are allocated a core subject from the following areas depending on the major chosen. Students should consult the sequence of subjects identified for each major. Limited choice may be available and this is indicated in the sequence for each major.

Subject	Title	Credit Points
Students are allocated two of the following:		20
BIOS 1001	Biodiversity	
BIOS 1012	Cell Biology	
CHEM 1012	Essential Chemistry	
Students are allocated one of the following:		10
MATH 1003	Biometry	
MATH 1026	Quantitative Thinking	
MATH 1014	Mathematics 1A	
Students are allocated 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	
Students are allocated one of the following:		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Students are allocated 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		**60**

Specialisations

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

Anatomy and Physiology, Testamur Major (T084) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/anatomy-physiology-ug-testamur-major/)

Biomedical Science, Testamur Major (T086) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/biomedical-science-ug-testamur-major/)

Human Nutrition, Testamur Major (T125) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/human-nutrition-ug-testamur-major/)

Electives

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

Students may complete a second testamur major chosen from the list below
NOTE: Students must seek advice from their Academic Course Advisor before selecting a second testamur major (or major) to ensure course requirements are met

Agrifood, Testamur Major (T123) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/agrifood-ug-testamur-major/)

Anatomy and Physiology, Testamur Major (T084) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/anatomy-physiology-ug-testamur-major/)

Animal Science, Testamur Major (T054) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/animal-science-ug-testamur-major/)

Biology, Testamur Major (T053) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/biology-ug-testamur-major/)

Biomedical Science, Testamur Major (T086) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/biomedical-science-ug-testamur-major/)

Chemistry, Testamur Major (T026) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/chemistry-ug-testamur-major/)

Innovative Foods, Testamur Major (T124) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/innovative-foods-ug-testamur-major/)

Sustainable Environmental Futures, Testamur Major (T120) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/sustainable-environmental-futures-ug-testamur-major/)

Zoology, Testamur Major (T029) (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/zoology-ug-testamur-major/)

Suggested minors

Environmental Health, Minor (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/environmental-health-minor/)
Infectious Diseases, Minor (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/infectious-diseases-minor/)
Microbiology, Minor (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/microbiology-minor/)

Enrolment in elective subject is subject to meeting any required criteria for individual subjects, such as co-requisites and pre-requisites.

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/archives/2022-2023/majors-minors/global-sustainability-minor/)
Indigenous Australian Studies Major (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/indigenous-australian-studies-major/)
Indigenous Australian Studies Minor (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/indigenous-australian-studies-minor/)

Western Sydney University also offers the following innovative transdisciplinary minors which we encourage those students who have elective space to consider.

Equitable Technologies (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/equitable-technologies-minor/)
Urban Evolution (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/urban-evolution-minor/)
Migration and Global Change (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/migration-global-change-minor/)
Personal Innovation (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/personal-innovation-minor/)
Innovating, Creating and Problem Solving (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/innovating-creating-problem-solving-minor/)
Eco-Socially Conscious Design and Manufacturing (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/eco-socially-conscious-design-manufacturing-minor/)
Water for Life (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/water-life-minor/)
Climate Justice (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/climate-justice-minor/)
Global Workplaces (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/global-workplaces-minor/)
Innovating For Humans (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/innovating-humans-minor/)
Creative Living for Cultural Wellbeing (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/creative-living-cultural-wellbeing-minor-/)
Ideate. Strategise. Innovate. (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/ideate-strategise-innovate-minor/)
Humanising Data (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/humanising-data-minor/)

Search for majors and minors (https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/)

Students can apply for an elective major or minor via MySR.

MyStudentRecords (MySR) (https://student-selfservice.westernsydney.edu.au/StudentSelfService/ssb/studentCommonDashboard/)