UNIVERSITY OF CANBERRA

Bachelor of Medical Science (NPB002.1)

Please note these are the 2023 details for this course

Domestic students

Selection rank	60 **Note:** The selection rank is the minimum ATAR plus adjustment factors required for admission to the program in the previous year. This is an indicative guide only as ranks change each year depending on demand.
Delivery mode	On campus
Location	Bruce, Canberra
Duration	3.0 years
Faculty	Faculty of Science and Technology
Discipline	Academic Program Area - Science
UAC code	368083
English language requirements	An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent). View IELTS equivalences

International students

Academic entry requirements	To study at UC, you'll need to meet our academic entry requirements and any admission requirements specific to your course. Please read your course admission requirements below. To find out whether you meet UC's academic entry requirements, visit our academic entry requirements page.

	View UC's academic entry requirements
Delivery mode	On campus
Location	Bruce, Canberra
Duration	3.0 years
Faculty	Faculty of Science and Technology
Discipline	Academic Program Area - Science
CRICOS code	106073B
English language requirements	An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent). View IELTS equivalences

About this course

Understand the science behind medicine

UC's Bachelor of Medical Science provides you with the foundational understanding of the science that underpins medicine, human health, disease and general well-being. Unlock your career ambitions and gain the comprehensive knowledge and skills that enable you to understand the unique interactions between cellular, chemical and biological sciences.

Engaging with the revitalised curriculum that builds upon science as a core major, study key areas like chemistry and biology at the molecular, cellular, organ and whole organism level while engaging in research projects or work integrated learning.

With a strong emphasis on professional skills and an integrated group work approach, you will examine contemporary issues in health and disease in the latter half of the degree.
In addition to the core science major, you'll also complete two specialist majors, the Pathological Basis of Disease and the Genetic Basis of Disease. This will allow you to develop the in-depth skills required to navigate the ever-changing and fast-paced medical science industry.

Study a Bachelor of Medical Science at UC and you will

- Understand the function and structure of health and the human body, including our anatomy and physiology
- Improve medical science outcomes with skills obtained in reasoning, technical analysis and communication

- Develop critical thinking and data analysis skills to solve a range of real-world issues on a local and global level for health and disease
- Evaluate current and emerging ethical and cultural issues that arise in medical science
- Select and apply tools to conduct scientific investigations relevant to medical science, while being transferable to a range of disciplines
- Demonstrate the ability to collect scientific data individually and collaboratively, within legal, ethical and social frameworks
- Critically analyse, synthesise and integrate scientific knowledge, literature, data, or arguments for effective communication to a range of audiences.

Work Integrated Learning

Step out of the classroom and into the real-world. Our professional practice units are an integral component of this degree and allow you to conduct real life experiments. Work with the latest technologies and clinical practices in a range of laboratories in industry or government settings, or explore our own labs by undertaking research projects with support from UC researchers.

Career opportunities

The UC Bachelor of Medical Science will help you progress into any of the following career pathways:

- Biological Scientist
- Biotechnologist
- Medical Scientist
- Medical Science Officer
- Research Officer
- Scientific Evaluator
- Science Policy Officer

Course specific information

Our Bachelor of Medical Science is perfect for anyone wanting a career in medical science research, or for those with ambition to sit the Graduate Medical School Admissions Test (GAMSAT). Eligible students can then pursue postgraduate Medicine, while having the freedom to explore other career paths or study ambitions.

Professional accreditation

Not applicable.

Admission requirements

Admission to this course is based on an entrance rank. A rank can be achieved by the following means: Year 12 ATAR, other Australian Qualification, work experience, overseas qualification.

Assumed knowledge

Year 12 Biology (T)/Human Biology (T), Chemistry (T) and Mathematical Methods (T) or equivalent.

Periods course is open for new admissions

Year	Location	Teaching period	Teaching start date	Domestic	International
2025	Bruce, Canberra	Semester 1	03 February 2025	✓	✓
2025	Bruce, Canberra	Semester 2	28 July 2025	✓	✓
2026	Bruce, Canberra	Semester 1	16 February 2026	✓	✓
2026	Bruce, Canberra	Semester 2	10 August 2026	✓	✓
2027	Bruce, Canberra	Semester 1	15 February 2027	✓	✓
2027	Bruce, Canberra	Semester 2	09 August 2027	✓	✓

Credit arrangements

A credit transfer arrangement is available for this course for the following institutions:

University Of Canberra College

Diploma of Science (31045)

Course requirements

Bachelor of Medical Science (NPB002) | 72 credit points

Expand All | Collapse All

Required - Must pass 72 credit points as follows

Core Major in Science (CM0029) | 24 credit points

Required - Must pass 24 credit points as follows

Professional Orientation (Science) (11718) | 3 credit points — Level 1

Professional Practice 1 (Science) (11719) | 3 credit points — Level 2

Professional Practice 2 (Science) (11720) | 3 credit points — Level 3

Professional Evidence (Science) (11721) | 3 credit points — Level 3

Biological Concepts (11722) | 3 credit points — Level 1

Data Analysis Skills for Science (11723) | 3 credit points — Level 1

Chemical Concepts (11724) | 3 credit points — Level 1

Contextual Physics with Mathematics (11725) | 3 credit points — Level 1

Specialist Major in Medical Science - Pathological Basis of Disease (SM0081) | 24 credit points

Required - Must pass 24 credit points as follows

Systemic Anatomy and Physiology (6529) | 3 credit points — Level 1

Regional Anatomy and Physiology (9808) | 3 credit points — Level 1

Integrated Physiology (11726) | 3 credit points — Level 3

Mechanisms of Disease (11727) | 3 credit points — Level 2

Therapeutic Chemistry (11728) | 3 credit points — Level 2

Excitable Tissue Physiology (11729) | 3 credit points — Level 3

Infectious Diseases (11730) | 3 credit points — Level 3

Genetic, Metabolic and Autoimmune Diseases (11731) | 3 credit points — Level 3

Specialist Major in Medical Science - Genetic Basis of Disease (SM0082) | 24 credit points

Required - Must pass 24 credit points as follows

Introduction to Data Science (11372) | 3 credit points — Level 3

Foundations of Inheritance, Diversity and Evolution (11732) | 3 credit points — Level 1

Fundamentals of Biochemistry (11733) | 3 credit points — Level 2

Biochemistry and Metabolism (11734) | 3 credit points — Level 2

Bioinformatics (11735) | 3 credit points — Level 2

Genetics and Genomics (11736) | 3 credit points — Level 2

Advanced Genetics and Genomics (11737) | 3 credit points — Level 3

Advances in Research in Health and Medicine (11738) | 3 credit points — Level 3

In addition to course requirements, in order to successfully complete your course you must meet the inherent requirements. Please refer to the inherent requirements statement applicable to your course

Typical study pattern

UC - Canberra, Bruce

Standard Full Time, Semester 1 Commencing

Year 1

Semester 1

Biological Concepts (11722)

Contextual Physics with Mathematics (11725)

Professional Orientation (Science) (11718)

Regional Anatomy and Physiology (9808)

Semester 2

Chemical Concepts (11724)

Data Analysis Skills for Science (11723)

Foundations of Inheritance, Diversity and Evolution (11732)

Systemic Anatomy and Physiology (6529)

Year 2

Semester 1

Fundamentals of Biochemistry (11733)

Integrated Physiology (11726)

Introduction to Data Science (11372)

Mechanisms of Disease (11727)

Semester 2

Genetics and Genomics (11736)

Infectious Diseases (11730)

Professional Practice 1 (Science) (11719)

Therapeutic Chemistry (11728)

Year 3

Semester 1

Advanced Genetics and Genomics (11737)

Bioinformatics (11735)

Genetic, Metabolic and Autoimmune Diseases (11731)

Professional Practice 2 (Science) (11720)

Semester 2

Advances in Research in Health and Medicine (11738)

Biochemistry and Metabolism (11734)

Excitable Tissue Physiology (11729)

Professional Evidence (Science) (11721)

Standard Full Time, Semester 2 Commencing

Year 1

Semester 2

Biological Concepts (11722)

Chemical Concepts (11724)

Professional Orientation (Science) (11718)

Systemic Anatomy and Physiology (6529)

Year 2

Semester 1

Contextual Physics with Mathematics (11725)

Data Analysis Skills for Science (11723)

Fundamentals of Biochemistry (11733)

Regional Anatomy and Physiology (9808)

Semester 2

Biochemistry and Metabolism (11734)

Foundations of Inheritance, Diversity and Evolution (11732)

Professional Practice 1 (Science) (11719)

Therapeutic Chemistry (11728)

Year 3

Semester 1

Integrated Physiology (11726)

Introduction to Data Science (11372)

Mechanisms of Disease (11727)

Professional Practice 2 (Science) (11720)

Semester 2

Advances in Research in Health and Medicine (11738)

Excitable Tissue Physiology (11729)

Genetics and Genomics (11736)

Infectious Diseases (11730)

Year 4

Semester 1

Advanced Genetics and Genomics (11737)

Bioinformatics (11735)

Genetic, Metabolic and Autoimmune Diseases (11731)

Professional Evidence (Science) (11721)

Standard Part Time, Semester 1 Commencing

Year 1

Semester 1

Contextual Physics with Mathematics (11725)

Professional Orientation (Science) (11718)

Semester 2

Chemical Concepts (11724)

Data Analysis Skills for Science (11723)

Year 2

Semester 1

Biological Concepts (11722)

Regional Anatomy and Physiology (9808)

Semester 2

Foundations of Inheritance, Diversity and Evolution (11732)

Systemic Anatomy and Physiology (6529)

Year 3

Semester 1

Fundamentals of Biochemistry (11733)

Mechanisms of Disease (11727)

Semester 2

Genetics and Genomics (11736)

Therapeutic Chemistry (11728)

Year 4

Semester 1

Integrated Physiology (11726)

Introduction to Data Science (11372)

Semester 2

Infectious Diseases (11730)

Professional Practice 1 (Science) (11719)

Year 5

Semester 1

Bioinformatics (11735)

Genetic, Metabolic and Autoimmune Diseases (11731)

Semester 2

Biochemistry and Metabolism (11734)

Excitable Tissue Physiology (11729)

Year 6

Semester 1

Advanced Genetics and Genomics (11737)

Professional Practice 2 (Science) (11720)

Semester 2

Advances in Research in Health and Medicine (11738)

Professional Evidence (Science) (11721)

Standard Part Time, Semester 2 Commencing

Year 1

Semester 2

Biological Concepts (11722)

Professional Orientation (Science) (11718)

Year 2

Semester 1

Contextual Physics with Mathematics (11725)

Data Analysis Skills for Science (11723)

Semester 2

Chemical Concepts (11724)

Foundations of Inheritance, Diversity and Evolution (11732)

Year 3

Semester 1

Fundamentals of Biochemistry (11733)

Regional Anatomy and Physiology (9808)

Semester 2

Systemic Anatomy and Physiology (6529)

Therapeutic Chemistry (11728)

Year 4

Semester 1

Integrated Physiology (11726)

Mechanisms of Disease (11727)

Semester 2

Genetics and Genomics (11736)

Introduction to Data Science (11372)

Year 5

Semester 1

Bioinformatics (11735)

Professional Practice 1 (Science) (11719)

Semester 2

Biochemistry and Metabolism (11734)

Infectious Diseases (11730)

Year 6

Semester 1

Advanced Genetics and Genomics (11737)

Professional Practice 2 (Science) (11720)

Semester 2

Advances in Research in Health and Medicine (11738)

Excitable Tissue Physiology (11729)

Year 7

Semester 1

Genetic, Metabolic and Autoimmune Diseases (11731)

Professional Evidence (Science) (11721)

Course information

Course duration

Standard 3 years full time or part-time equivalent. Maximum 10 years from date of enrolment to date of course completion.

Learning outcomes

Learning outcomes	Related graduate attributes
Develop critical thinking and data analysis skills to solve a range of theoretical and contemporary real-world problems in local and global contexts, recognising the importance of entrepreneurship, innovation and work-integrated learning.	UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; display initiative and drive, and use their organisational skills to plan and manage their workload; and take pride in their professional and personal integrity. UC graduates are global citizens: Think globally about issues in their profession; adopt an informed and balanced approach across professional and

	international boundaries; understand issues in their profession from the perspective of other cultures; communicate effectively in diverse cultural and social settings; make creative use of technology in their learning and professional lives; and behave ethically and sustainably in their professional and personal lives. UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas; and evaluate and adopt new technology. UC graduates are able to demonstrate Aboriginal and Torres Strait Islander ways of knowing, being and doing: Use local Indigenous histories and traditional ecological knowledge to develop and augment understanding of their discipline; communicate and engage with Indigenous Australians in ethical and culturally respectful ways; and apply their knowledge to working with Indigenous Australians in socially just ways.
Critically analyse, synthesise and integrate scientific knowledge, literature, data, or arguments for effective communication to a range of audiences.	UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; display initiative and drive, and use their organisational skills to plan and manage their workload; and take pride in their professional and personal integrity. UC graduates are global citizens: Think globally about issues in their profession; adopt an informed and balanced approach across professional and international boundaries; understand issues in their profession from the perspective of other cultures; communicate effectively in diverse cultural and social settings; make creative use of technology in their learning and professional lives; and behave ethically and sustainably in their professional and personal lives. UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas; and evaluate and adopt new technology.

	UC graduates are able to demonstrate Aboriginal and Torres Strait Islander ways of knowing, being and doing: Use local Indigenous histories and traditional ecological knowledge to develop and augment understanding of their discipline; communicate and engage with Indigenous Australians in ethical and culturally respectful ways; and apply their knowledge to working with Indigenous Australians in socially just ways.
Demonstrate the ability to collect scientific data individually or collaboratively, within legal, ethical and social frameworks, with key laboratory, clinical and/or field-based competencies.	UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; display initiative and drive, and use their organisational skills to plan and manage their workload; and take pride in their professional and personal integrity. UC graduates are global citizens: Think globally about issues in their profession; adopt an informed and balanced approach across professional and international boundaries; understand issues in their profession from the perspective of other cultures; communicate effectively in diverse cultural and social settings; and make creative use of technology in their learning and professional lives. UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas; and evaluate and adopt new technology. UC graduates are able to demonstrate Aboriginal and Torres Strait Islander ways of knowing, being and doing: Use local Indigenous histories and traditional ecological knowledge to develop and augment understanding of their discipline; communicate and engage with Indigenous Australians in ethical and culturally respectful ways; and apply their knowledge to working with Indigenous Australians in socially just ways.
Select and apply appropriate practical, conceptual and/or theoretical techniques or scientific tools to conduct scientific investigations relevant to medical science, while being transferable to a range of disciplines.	UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; display

	initiative and drive, and use their organisational skills to plan and manage their workload; and take pride in their professional and personal integrity. UC graduates are global citizens: Think globally about issues in their profession; adopt an informed and balanced approach across professional and international boundaries; understand issues in their profession from the perspective of other cultures; communicate effectively in diverse cultural and social settings; make creative use of technology in their learning and professional lives; and behave ethically and sustainably in their professional and personal lives. UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; and adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas. UC graduates are able to demonstrate Aboriginal and Torres Strait Islander ways of knowing, being and doing: Use local Indigenous histories and traditional ecological knowledge to develop and augment understanding of their discipline; communicate and engage with Indigenous Australians in ethical and culturally respectful ways; and apply their knowledge to working with Indigenous Australians in socially just ways.
Acquire cognitive, technical and communication skills for evaluation of theoretical and technical information to generate improved outcomes in medical science.	UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; and display initiative and drive, and use their organisational skills to plan and manage their workload. UC graduates are global citizens: Think globally about issues in their profession; understand issues in their profession from the perspective of other cultures; communicate effectively in diverse cultural and social settings; make creative use of technology in their learning and professional lives; and behave ethically and sustainably in their professional and personal lives. UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas; and evaluate and adopt new

	technology. UC graduates are able to demonstrate Aboriginal and Torres Strait Islander ways of knowing, being and doing: Use local Indigenous histories and traditional ecological knowledge to develop and augment understanding of their discipline; and communicate and engage with Indigenous Australians in ethical and culturally respectful ways.
Evaluate current and emerging ethical and cultural issues that arise in contemporary medical science, and exhibit cross-cultural competence and social responsibility.	UC graduates are professional: Employ up-to-date and relevant knowledge and skills; communicate effectively; use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems; work collaboratively as part of a team, negotiate, and resolve conflict; and display initiative and drive, and use their organisational skills to plan and manage their workload. UC graduates are global citizens: Think globally about issues in their profession; adopt an informed and balanced approach across professional and international boundaries; understand issues in their profession from the perspective of other cultures; communicate effectively in diverse cultural and social settings; make creative use of technology in their learning and professional lives; and behave ethically and sustainably in their professional and personal lives. UC graduates are lifelong learners: Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; be self-aware; and adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas. UC graduates are able to demonstrate Aboriginal and Torres Strait Islander ways of knowing, being and doing: Use local Indigenous histories and traditional ecological knowledge to develop and augment understanding of their discipline; communicate and engage with Indigenous Australians in ethical and culturally respectful ways; and apply their knowledge to working with Indigenous Australians in socially just ways.

Placements requirements

Student may require a police check, working with vulnerable people, current vaccination.

Majors

- Specialist Major in Medical Science - Pathological Basis of Disease (SM0081)
- Specialist Major in Medical Science - Genetic Basis of Disease (SM0082)
- Core Major in Science (CM0029)

Awards

Award	Official abbreviation
Bachelor of Medical Science	B MedSc

Enquiries

Student category	Contact details
Current and Commencing Students	Please contact the University Student Centre by Email student.centre@canberra.edu.au or Phone 1300 301 727
Prospective Students	Please email: study@canberra.edu.au or telephone: 1800 UNI CAN (1800 864 226)

Download your course guide

Scholarships

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CRICOS 00212K

TEQSA Provider ID: PRV12003 (Australian University)

UC acknowledges the Ngunnawal people, traditional custodians of the lands where Bruce campus is situated. We wish to acknowledge and respect their continuing culture and the contribution they make to the life of Canberra and the region. We also acknowledge all other First Nations Peoples on whose lands we gather.