

# Bachelor of Science (NPB003.1)

Please note these are the 2023 details for this course

## Domestic students

Selection rank	60 <b>Note:</b> 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	368103
English language requirements	An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent). <a href="#">View IELTS equivalences</a>

## 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 <a href="#">academic entry requirements page</a> .
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[View UC's academic entry requirements](#)

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<b>Delivery mode</b>	On campus
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<b>Location</b>	Bruce, Canberra
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<b>Duration</b>	3.0 years
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<b>Faculty</b>	Faculty of Science and Technology
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<b>Discipline</b>	Academic Program Area - Science
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<b>CRICOS code</b>	111524D
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<b>English language requirements</b>	An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent).
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[View IELTS equivalences](#)

# About this course

## Go beyond the boundaries of Science

UC's new Bachelor of Science has been created to help expand your scientific knowledge, while giving you the freedom to explore what you like and discover what you love.

With six specialist majors to choose from, you will be able to self-curate your own study program. The specialist majors include:

- Biomedical science
- Environmental science
- Human movement
- Nutrition studies
- Chemical science
- Biological science

Plus, with room to study eight open electives in areas like Health, Communications, Technology, or Law, you'll diversify your skillset, broaden or deepen your knowledge base, and increase your employment prospects.

Building on the strong foundational Core Major in Science, you'll develop a highly-transferrable set of skills that include critical thinking, scientific reasoning, data analysis and communication that'll stay with you long after graduating. You'll also undertake scenario-based study, participate in practical work integrated learning opportunities, and use industry-standard lab equipment. These experiences and skills will equip you to solve a range of theoretical and contemporary real-world problems.

## Study a Bachelor of Science at UC and you will

- Develop critical thinking and data analysis skills to solve a range of issues on a local or global scale, recognising the importance of entrepreneurship, innovation and work-integrated learning.
- Acquire scientific reasoning, technical, analysis and communication skills.
- Collect scientific data within legal, ethical and social frameworks, with key laboratory, clinical and/or field-based competencies.
- Exhibit breadth of scientific knowledge and technical skills, with a depth in at least one science specialist area. Conduct scientific investigations relevant to a range of disciplines.
- Evaluate current and emerging ethical and cultural issues that arise in contemporary science and exhibit cross-cultural competence and social responsibility.

## Work Integrated Learning

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

## Career opportunities

Depend on the specialist area(s) of study but the course can lead to a diverse range of careers, including but not limited to:

- Biomedical scientist
- Pathology scientific officer
- Research officer
- Scientific evaluator
- Environmental manager
- Research scientist
- Environmental scientist
- Natural resources manager
- Policy officer
- Sustainability officer
- STEM teacher (when combined with suitable Education qualification)

## Course specific information

The course may also lead to postgraduate studies in science and allied health (including nutrition and physiotherapy).

# 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:

### Defence Registered Training Organisation

[Diploma of Business \(33229\)](#)

### University Of Canberra College

[Diploma of Science \(31146\)](#)

# Course requirements

Bachelor of Science (NPB003) | 72 credit points

**Required - 72 credit points as follows**

[Expand All](#) | [Collapse All](#)

**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

## **Open Electives - 24 credit points from the following**

- Must pass 24 credit points from anywhere in the University, as a breadth major, a breadth minor and/or as individual units.

## **Restricted Choice - Must select 1 of the following**

### **Specialist Major in Human Movement (SM0036) | 24 credit points**

#### **Required - Must pass 18 credit points as follows**

Biomechanics 1 (6834) | 3 credit points – Level 2

Biomechanics 2 (6835) | 3 credit points – Level 3

Advanced Functional Anatomy (8279) | 3 credit points – Level 3

Human Growth and Development (8338) | 3 credit points – Level 1

Physiology of Exercise 1 (8391) | 3 credit points – Level 2

Physiology of Exercise 2 (8392) | 3 credit points – Level 3

## **Restricted Choice - Must pass 6 credit points from the following**

### **Part B - Must pass 3 credit points from the following**

Exercise Programming and Prescription 2 (9812) | 3 credit points – Level 2

Exercise Programming and Prescription for Performance (12136) | 3 credit points – Level 2

Note:

- From Sem 1, 2025 unit 12136 Exercise Programming and Prescription for Performance replaces unit 9812 Exercise Programming and Prescription 2

### **Part A - Must pass 3 credit points from the following**

Exercise Programming and Prescription 1 (9811) | 3 credit points – Level 1

Exercise Programming and Prescription Fundamentals (12134) | 3 credit points – Level 1

Note:

- From Sem 1, 2025 unit 12134 Exercise Programming and Prescription Fundamentals

replaces unit 9811 Exercise Programming and Prescription 1

## **Specialist Major in Nutrition Studies (SM0037) | 24 credit points**

### **Required - Must pass 24 credit points as follows**

Food Science (8251) | 3 credit points – Level 2

Nutrition Across the Lifecycle (8253) | 3 credit points – Level 3

Nutrition and Disease (8255) | 3 credit points – Level 3

Nutritional Science (8257) | 3 credit points – Level 2

Nutrition, Society and Health (8259) | 3 credit points – Level 3

Sports Nutrition (8721) | 3 credit points – Level 3

Introduction to Food Science (9279) | 3 credit points – Level 1

Introductory Nutrition (9280) | 3 credit points – Level 1

## **Specialist Major in Biomedical Science (SM0080) | 24 credit points**

### **Required - Must pass 15 credit points as follows**

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

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

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

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

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

### **Restricted Choice - 9 credit points as follows**

#### **Part A - Must pass 3 credit points from the following**

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

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

Foundations of Anatomy and Physiology (10298) | 3 credit points – Level 1

Note:

- Students should take 10298 unless they plan to complete BM0025 Breadth Major in Health & Movement, in which case they should take 9808 (S1 entry) or 6529 (S2 entry)

### **Part B - Must pass 3 credit points from the following**

Health Patterns of Disease (8576) | 3 credit points – Level 2

Epidemiology and Principles of Research (8580) | 3 credit points – Level 3

### **Part C - Must pass 3 credit points from the following**

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

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

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

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

## **Specialist Major in Environmental Science (SM0044) | 24 credit points**

### **Required - Must pass 24 credit points as follows**

Meeting Environmental Challenges: Foundations (11771) | 3 credit points – Level 1

Diversity of Life and Habitats (11772) | 3 credit points – Level 1

Applied Ecology (11773) | 3 credit points – Level 2

Environmental Stress and Adaptation (11774) | 3 credit points – Level 2

Environmental Tools and Technologies (11775) | 3 credit points – Level 2

Land and Water (11776) | 3 credit points – Level 2

Tackling Environmental Challenges: Conservation (11777) | 3 credit points – Level 3

Tackling Environmental Challenges: Water (11778) | 3 credit points – Level 3

## **Specialist Major in Biological Science (SM0085) | 24 credit points**

### **Required - Must pass 15 credit points as follows**

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

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

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

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

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

### **Restricted Choice - Must pass 9 credit points as follows**

#### **Part B - Must pass 6 credit points as follows**

- Students must complete 6CP (2 units) aligned with their scientific interests, and must seek approval from the Program Director prior to enrolment. Unapproved units will not be permitted.

### **Part A - Must pass 3 credit points from the following**

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

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

Foundations of Anatomy and Physiology (10298) | 3 credit points – Level 1

## **Specialist Major in Chemical Science (SM0086) | 24 credit points**

### **Required - Must pass 18 credit points as follows**

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

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

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

Chemical Foundations (11768) | 3 credit points – Level 1

Chemical Analysis (11769) | 3 credit points – Level 2

Chemical Applications (11770) | 3 credit points – Level 3

### **Restricted Choice - Must pass 6 credit points as follows**

- Students must complete 6CP (2 units) aligned with their scientific interests, and must seek approval from the Program Director prior to enrolment. Unapproved units will not be permitted.

- 1. From Sem 2, 2023, students must complete a minimum of 18 credit points (6 units) at Level 3 or higher within their degree.
- 2. Students completing SM0044 Specialist Major in Environmental Science must complete a minimum of 6CP (2 units) of open electives at Level 3, in addition to their required units.
- 3. Students completing SM0080 Specialist Major in Biomedical Science must complete a minimum of 9CP (3 units) of Part B/C units or open electives at Level 3, in addition to their required units.
- 4. Students completing SM0085 Specialist Major in Biological Science must complete a minimum of 6CP (2 units) of Part B units or open electives at Level 3, in addition to their required units.
- 5. Students completing SM0086 Specialist Major in Chemical Science must complete a minimum of 9CP (3 units) of Part B units or open electives at Level 3, in addition to their required units.
- 6. Students completing SM0036 Specialist Major in Human Movement must complete a minimum of 3CP (1 unit)



of open electives at Level 3, in addition to their required units.

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 \(11725\)](#)

[Data Analysis Skills for Science \(11723\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

### Semester 2

Open Elective

Two Specialist Major Units

[Chemical Concepts \(11724\)](#)

## Year 2

### Semester 1

Two Open Electives

Two Specialist Major Units

### Semester 2

Open Elective

[Professional Practice 1 \(Science\) \(11719\)](#)

Two Specialist Major Units

## Year 3

### Semester 1

One Specialist Major Unit

[Professional Practice 2 \(Science\) \(11720\)](#)

Two Open Electives

**Semester 2**

One Specialist Major Unit

[Professional Evidence \(Science\) \(11721\)](#)

Two Open Electives

## Standard Full Time, Semester 1 Commencing with Biological Science Specialisation

**Year 1**

**Semester 1**

[Biological Concepts \(11722\)](#)

[Contextual Physics with Mathematics \(11725\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

SM0085 Restricted Choice Part A Unit

**Semester 2**

[Foundations of Inheritance, Diversity and Evolution \(11732\)](#)

Open Elective

[Chemical Concepts \(11724\)](#)

[Data Analysis Skills for Science \(11723\)](#)

**Year 2**

**Semester 1**

[Mechanisms of Disease \(11727\)](#)

SM0085 Restricted Choice Part B Unit

Two Open Electives

**Semester 2**

SM0085 Restricted Choice Part B Unit

[Genetics and Genomics \(11736\)](#)

[Professional Practice 1 \(Science\) \(11719\)](#)

Open Elective

**Year 3**

**Semester 1**

[Professional Practice 2 \(Science\) \(11720\)](#)

Two Open Electives

[Advanced Genetics and Genomics \(11737\)](#)

**Semester 2**

[Infectious Diseases \(11730\)](#)

[Professional Evidence \(Science\) \(11721\)](#)

Two Open Electives

## Standard Full Time, Semester 1 Commencing with Biomedical Science Specialisation

**Year 1****Semester 1**

[Biological Concepts \(11722\)](#)

SM0080 Restricted Choice Part A Unit

[Contextual Physics with Mathematics \(11725\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

**Semester 2**

[Chemical Concepts \(11724\)](#)

Open Elective

[Data Analysis Skills for Science \(11723\)](#)

[Foundations of Inheritance, Diversity and Evolution \(11732\)](#)

**Year 2****Semester 1**

[Fundamentals of Biochemistry \(11733\)](#)

[Mechanisms of Disease \(11727\)](#)

Two Open Electives

**Semester 2**

[Professional Practice 1 \(Science\) \(11719\)](#)

Open Elective

SM0080 Restricted Choice Part B Unit

[Genetics and Genomics \(11736\)](#)

### **Year 3**

#### **Semester 1**

[Integrated Physiology \(11726\)](#)

[Professional Practice 2 \(Science\) \(11720\)](#)

Two Open Electives

#### **Semester 2**

[Professional Evidence \(Science\) \(11721\)](#)

Two Open Electives

SM0080 Restricted Choice Part C Unit

## **Standard Full Time, Semester 1 Commencing with Chemical Science Specialisation**

### **Year 1**

#### **Semester 1**

[Biological Concepts \(11722\)](#)

[Chemical Foundations \(11768\)](#)

[Contextual Physics with Mathematics \(11725\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

#### **Semester 2**

[Chemical Concepts \(11724\)](#)

SM0086 Restricted Choice Part A Unit

[Data Analysis Skills for Science \(11723\)](#)

Open Elective

### **Year 2**

#### **Semester 1**

Two Open Electives

[Chemical Analysis \(11769\)](#)

[Fundamentals of Biochemistry \(11733\)](#)

#### **Semester 2**

[Professional Practice 1 \(Science\) \(11719\)](#)

Open Elective

[Biochemistry and Metabolism \(11734\)](#)

[Therapeutic Chemistry \(11728\)](#)

**Year 3**

**Semester 1**

[Professional Practice 2 \(Science\) \(11720\)](#)

Two Open Electives

[Chemical Applications \(11770\)](#)

**Semester 2**

[Professional Evidence \(Science\) \(11721\)](#)

SM0086 Restricted Choice Part A Unit

Two Open Electives

## Standard Full Time, Semester 1 Commencing with Environmental Science Specialisation

**Year 1**

**Semester 1**

[Biological Concepts \(11722\)](#)

[Contextual Physics with Mathematics \(11725\)](#)

[Meeting Environmental Challenges: Foundations \(11771\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

**Semester 2**

[Chemical Concepts \(11724\)](#)

[Data Analysis Skills for Science \(11723\)](#)

[Diversity of Life and Habitats \(11772\)](#)

Open Elective

**Year 2**

**Semester 1**

Two Open Electives

[Applied Ecology \(11773\)](#)

[Environmental Tools and Technologies \(11775\)](#)

**Semester 2**

[Environmental Stress and Adaptation \(11774\)](#)

Land and Water (11776)

Professional Practice 1 (Science) (11719)

Open Elective

### **Year 3**

#### **Semester 1**

Professional Practice 2 (Science) (11720)

Tackling Environmental Challenges: Conservation (11777)

Two Open Electives

#### **Semester 2**

Two Open Electives

Professional Evidence (Science) (11721)

Tackling Environmental Challenges: Water (11778)

## **Standard Full Time, Semester 1 Commencing with Human Movement Specialisation**

### **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)

Human Growth and Development (8338)

Systemic Anatomy and Physiology (6529)

### **Year 2**

#### **Semester 1**

Biomechanics 1 (6834)

Open Elective

Exercise Programming and Prescription 1 (9811)

[Physiology of Exercise 1 \(8391\)](#)

**Semester 2**

Open Elective

[Biomechanics 2 \(6835\)](#)

[Exercise Programming and Prescription 2 \(9812\)](#)

[Professional Practice 1 \(Science\) \(11719\)](#)

**Year 3**

**Semester 1**

Open Elective

[Advanced Functional Anatomy \(8279\)](#)

[Professional Practice 2 \(Science\) \(11720\)](#)

**Semester 2**

[Physiology of Exercise 2 \(8392\)](#)

Open Elective

[Professional Evidence \(Science\) \(11721\)](#)

## Standard Full Time, Semester 1 Commencing with Nutrition Studies Specialisation

**Year 1**

**Semester 1**

[Biological Concepts \(11722\)](#)

[Contextual Physics with Mathematics \(11725\)](#)

[Introductory Nutrition \(9280\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

**Semester 2**

[Chemical Concepts \(11724\)](#)

[Nutritional Science \(8257\)](#)

Open Elective

[Data Analysis Skills for Science \(11723\)](#)

**Year 2**

**Semester 1**

Two Open Electives

[Introduction to Food Science \(9279\)](#)

[Sports Nutrition \(8721\)](#)

**Semester 2**

[Food Science \(8251\)](#)

[Nutrition, Society and Health \(8259\)](#)

[Professional Practice 1 \(Science\) \(11719\)](#)

Open Elective

**Year 3**

**Semester 1**

Two Open Electives

[Nutrition Across the Lifecycle \(8253\)](#)

[Professional Practice 2 \(Science\) \(11720\)](#)

**Semester 2**

[Nutrition and Disease \(8255\)](#)

Two Open Electives

[Professional Evidence \(Science\) \(11721\)](#)

## Standard Full Time, Semester 2 Commencing with Biological Science Specialisation

**Year 1**

**Semester 2**

[Biological Concepts \(11722\)](#)

SM0085 Restricted Choice Part A Unit

[Chemical Concepts \(11724\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

**Year 2**

**Semester 1**

[Contextual Physics with Mathematics \(11725\)](#)

[Data Analysis Skills for Science \(11723\)](#)

Open Elective



[Foundations of Anatomy and Physiology \(10298\)](#)

**Semester 2**

Two Open Electives

[Foundations of Inheritance, Diversity and Evolution \(11732\)](#)

SM0085 Restricted Choice Part B Unit

**Year 3**

**Semester 1**

[Mechanisms of Disease \(11727\)](#)

[Professional Practice 1 \(Science\) \(11719\)](#)

Open Elective

SM0085 Restricted Choice Part B Unit

**Semester 2**

[Professional Practice 2 \(Science\) \(11720\)](#)

Open Elective

[Genetics and Genomics \(11736\)](#)

[Infectious Diseases \(11730\)](#)

**Year 4**

**Semester 1**

[Professional Evidence \(Science\) \(11721\)](#)

Two Open Electives

[Advanced Genetics and Genomics \(11737\)](#)

## Standard Full Time, Semester 2 Commencing with Biomedical Science Specialisation

**Year 1**

**Semester 2**

SM0080 Restricted Choice Part A Unit

[Biological Concepts \(11722\)](#)

[Chemical Concepts \(11724\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

**Year 2**

**Semester 1**

[Contextual Physics with Mathematics \(11725\)](#)

Open Elective

[Data Analysis Skills for Science \(11723\)](#)

[Fundamentals of Biochemistry \(11733\)](#)

**Semester 2**

[Foundations of Inheritance, Diversity and Evolution \(11732\)](#)

SM0080 Restricted Choice Part B Unit

Two Open Electives

**Year 3****Semester 1**

[Professional Practice 1 \(Science\) \(11719\)](#)

Open Elective

[Integrated Physiology \(11726\)](#)

[Mechanisms of Disease \(11727\)](#)

**Semester 2**

[Genetics and Genomics \(11736\)](#)

Open Elective

[Professional Practice 2 \(Science\) \(11720\)](#)

SM0080 Restricted Choice Part C Unit

**Year 4****Semester 1**

Open Elective

[Professional Evidence \(Science\) \(11721\)](#)

Two Open Electives

## Standard Full Time, Semester 2 Commencing with Chemical Science Specialisation

**Year 1****Semester 2**

Open Elective

Biological Concepts (11722)

Chemical Concepts (11724)

Professional Orientation (Science) (11718)

## **Year 2**

### **Semester 1**

Chemical Foundations (11768)

Contextual Physics with Mathematics (11725)

Data Analysis Skills for Science (11723)

Fundamentals of Biochemistry (11733)

### **Semester 2**

Therapeutic Chemistry (11728)

Two Open Electives

SM0086 Restricted Choice Part A Unit

## **Year 3**

### **Semester 1**

Two Open Electives

Chemical Analysis (11769)

Professional Practice 1 (Science) (11719)

### **Semester 2**

Two Open Electives

Biochemistry and Metabolism (11734)

Professional Practice 2 (Science) (11720)

## **Year 4**

### **Semester 1**

Chemical Applications (11770)

Professional Evidence (Science) (11721)

Open Elective

SM0086 Restricted Choice Part A Unit

Standard Full Time, Semester 2 Commencing with Environmental Science Specialisation

## **Year 1**

### **Semester 2**

[Diversity of Life and Habitats \(11772\)](#)

[Professional Orientation \(Science\) \(11718\)](#)

Open Elective

[Chemical Concepts \(11724\)](#)

## **Year 2**

### **Semester 1**

[Applied Ecology \(11773\)](#)

[Biological Concepts \(11722\)](#)

[Contextual Physics with Mathematics \(11725\)](#)

[Meeting Environmental Challenges: Foundations \(11771\)](#)

### **Semester 2**

[Data Analysis Skills for Science \(11723\)](#)

[Environmental Stress and Adaptation \(11774\)](#)

[Land and Water \(11776\)](#)

Open Elective

## **Year 3**

### **Semester 1**

Two Open Electives

[Environmental Tools and Technologies \(11775\)](#)

[Professional Practice 1 \(Science\) \(11719\)](#)

### **Semester 2**

[Tackling Environmental Challenges: Water \(11778\)](#)

Two Open Electives

[Professional Practice 2 \(Science\) \(11720\)](#)

## **Year 4**

### **Semester 1**

Two Open Electives

[Professional Evidence \(Science\) \(11721\)](#)

Tackling Environmental Challenges: Conservation (11777)

## Standard Full Time, Semester 2 Commencing with Human Movement Specialisation

### Year 1

#### Semester 2

Biological Concepts (11722)

Chemical Concepts (11724)

Professional Orientation (Science) (11718)

Systemic Anatomy and Physiology (6529)

### Year 2

#### Semester 1

Open Elective

Contextual Physics with Mathematics (11725)

Data Analysis Skills for Science (11723)

Regional Anatomy and Physiology (9808)

#### Semester 2

Two Open Electives

Human Growth and Development (8338)

Open Elective

### Year 3

#### Semester 1

Biomechanics 1 (6834)

Exercise Programming and Prescription 1 (9811)

Physiology of Exercise 1 (8391)

Professional Practice 1 (Science) (11719)

#### Semester 2

Biomechanics 2 (6835)

Exercise Programming and Prescription 2 (9812)

Physiology of Exercise 2 (8392)

Professional Practice 2 (Science) (11720)

Year 4

Semester 1

[Advanced Functional Anatomy \(8279\)](#)

Two Open Electives

[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
6. Evaluate current and emerging ethical and cultural issues that arise in contemporary science and exhibit cross-cultural competence and social responsibility.	<p>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; take pride in their professional and personal integrity.</p> <p>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; behave ethically and sustainably in their professional and personal lives.</p> <p>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; evaluate and adopt new technology.</p> <p>UC graduates are able to demonstrate Aboriginal and Torres Strait Islander</p>

	<p>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; apply their knowledge to working with Indigenous Australians in socially just ways.</p>
<p>3. 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.</p>	<p>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; take pride in their professional and personal integrity.</p> <p>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; behave ethically and sustainably in their professional and personal lives.</p> <p>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; evaluate and adopt new technology.</p> <p>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; apply their knowledge to working with Indigenous Australians in socially just ways.</p>
<p>1. 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.</p>	<p>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</p>

	<p>initiative and drive, and use their organisational skills to plan and manage their workload; take pride in their professional and personal integrity.</p> <p>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; behave ethically and sustainably in their professional and personal lives.</p> <p>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; evaluate and adopt new technology.</p> <p>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; apply their knowledge to working with Indigenous Australians in socially just ways.</p>
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5. Select and apply appropriate practical, conceptual and/or theoretical techniques or scientific tools to conduct scientific investigations relevant 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; 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; behave ethically and sustainably in their professional and personal lives.

UC graduates are lifelong learners: Reflect on their own practice, updating and



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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; 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; apply their knowledge to working with Indigenous Australians in socially just ways.

2. 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; take pride in their professional and personal integrity.

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4. Exhibit breadth of scientific knowledge and technical skills, with a depth in at least one science specialist area.

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## Placements requirements

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

## Majors

- [Core Major in Science \(CM0029\)](#)
- [Specialist Major in Nutrition Studies \(SM0037\)](#)
- [Specialist Major in Chemical Science \(SM0086\)](#)
- [Specialist Major in Human Movement \(SM0036\)](#)
- [Specialist Major in Environmental Science \(SM0044\)](#)
- [Specialist Major in Biological Science \(SM0085\)](#)
- [Specialist Major in Biomedical Science \(SM0080\)](#)

## Awards

Award	Official abbreviation
Bachelor of Science	BSc
Bachelor of Science (Biomedical Science)	BSc(BiomedicalSc)
Bachelor of Science (Environmental Science)	BSc(EnvSc)

## Enquiries

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

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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.