

## Bachelor of Environmental Science (791AA.5)

Please note these are the 2021 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.

---

English language requirements

An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent).

[View IELTS equivalences](#)

---

Duration 3.0 years

---

UAC code

---

Faculty Faculty of Science and Technology

---

Discipline Academic Program Area - Science

---

Location UC - Canberra, Bruce

---

Fees 2022: Commonwealth Supported Place  
2021: Commonwealth Supported Place

**Disclaimer:**

Annual fee rates

The fees shown are the annual fee rates for the course. The annual rate is the fee that applies to standard full-time enrolment, which is 24 credit points. The final fee charged is based on the proportion of 24 credit points in which a student enrolls. Students enrolled in a Commonwealth Support Place (CSP) are required to make a contribution towards the cost of their education, which is set by the Commonwealth Government. Information on Commonwealth Supported Places, HECS-HELP and how fees are calculated can be found [here](#).

### 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](#)

---

**English language requirements**

An IELTS Academic score of 6.0 overall, with no band score below 6.0 (or equivalent).

[View IELTS equivalences](#)

---

**CRICOS code**

054171A

---

**Faculty**

Faculty of Science and Technology

---

**Discipline**

Academic Program Area - Science

---

**Location**

UC - Canberra, Bruce

---

**Duration**

3.0 years

---

**Fees**

2022: \$33,600 per year

2021: \$32,900 per year

**Disclaimer:**

Annual fee rates

The fees shown are the annual fee rates for the course. The annual rate is the fee that applies to standard full-time enrolment, which is 24 credit points. The final fee charged is based on the proportion of 24 credit points in which a student enrolls. Information on how fees are calculated can be found [here](#).

---

## About this course

### Launch a sustainable career in environmental science

If you have a passion for wildlife and conservation and are keen for a career outdoors, the Bachelor of Environmental Science will see you playing an active part in caring for the environment now and into the future. The degree lets you explore a wide variety of areas including but not limited to: applied ecology, ecological conservation, vegetation and wildlife management, reserve management, coastal marine science, sustainability, land care and land management.

You'll benefit from studying in our nation's capital; the central focus of environmental issues in Australia, and will have access to UC's world-class laboratories for eco-chemistry, fresh water ecology, wildlife genetics and biodiversity. The faculty has strong partnership links with government and natural resource management organisations, as well as UC's Institute for Applied Ecology (IAE), which has a reputation for providing high quality research with an applied focus to solve environmental problems.

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

- join one of the most well-respected programs in the country
- explore both international and Australian environmental issues
- gain knowledge in applied research and teaching to become work-ready for a professional setting.

## Work Integrated Learning

Work Integrated Learning (WIL) is a central component of this course and you'll undertake a range of practical activities designed to prepare you for a sustainable career in environmental science, such as exposure to entrepreneurship in science and pitching ideas for funding and patenting, and guest lectures by esteemed industry professionals.

Our Environmental Science program is closely integrated with the [IAE](#) – one of our many research centres. Researchers within the IAE engage with on-ground managers and policymakers, giving you access to unique group research projects and training opportunities on campus in a leading research facility. You'll also undertake a range of exciting field trips to national parks in locations such as Willandra, the Snowy Mountains and the NSW South Coast.

You'll have the opportunity to complete a professional work placement and will be actively encouraged to volunteer in local, regional and international environmental programs. Previous students have undertaken internships with companies including the Centre for Australian National Biodiversity Research, CSIRO, ACT Parks and Wildlife, Department of Agriculture and Water Resources, Department of the Environment and Energy, Questacon, National Museum of Australia, environmental NGOs and the university sector.

If you'd like to study overseas, summer or winter term internships to Malaysia, Singapore or Thailand can be applied for, as well as faculty-led Environmental Science programs in New Zealand, Peru and Costa Rica. Each of these can count as credit towards your degree.

## Career opportunities

- Environmental scientist
- Environmental consultant
- Environmental chemist
- Environmental manager
- Environmental protection officer
- Educator
- Geologist
- Geochemist
- Geographic information system officer
- Invasive species officer
- Natural resource manager
- Park ranger
- Research scientist
- Sustainability officer
- Water scientist
- Waterways planner

## Course-specific information

High-achieving students may be eligible to enrol in the Bachelor of Applied Science (Honours) course.

Successful completion of this course, when linked with further postgraduate study such as a master's degree or PhD, could see you qualify as a research scientist in your chosen field.

## 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

We also offer a number of entry initiatives that give you the opportunity to gain entry to the University via alternate pathway programs and admissions schemes.

More information is available on our Alternative Entry page: <http://www.canberra.edu.au/future-students/applications/apply-now/alternative-entry>

## Assumed knowledge

ACT: Biology and/or Chemistry major(s) plus Mathematical Methods Major. NSW: Biology and/or Chemistry plus Mathematics.

## Periods course is open for new admissions

Year	Location	Teaching period	Teaching start date	Domestic	International
2021	UC - Canberra, Bruce	Semester 1	08 February 2021	✓	✓
2021	UC - Canberra, Bruce	Semester 2	02 August 2021	✓	✓

## Credit arrangements

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

University Of Canberra College

[Diploma of Science \(20250\)](#)

## Course requirements

### Bachelor of Environmental Science (791AA) | 72 credit points

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

[Concepts in Biology \(483\) | 3 credit points – Level 1](#)

[Mathematical Methods \(577\) | 3 credit points – Level 1](#)

[Plants and Animals \(623\) | 3 credit points – Level 1](#)

[Chemistry 1a \(1516\) | 3 credit points – Level 1](#)

[Data Analysis in Science \(1809\) | 3 credit points – Level 1](#)

[Communication in Science \(4732\) | 3 credit points – Level 1](#)

[Earth System Science \(8101\) | 3 credit points – Level 1](#)

[Tackling Environmental Challenges \(10235\) | 3 credit points – Level 3](#)

**Restricted Choice - 39 credit points as follows**

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

[Professional Practice in Applied Science \(8783\) | 3 credit points – Level 3](#)

[Research Project in Applied Science \(9632\) | 3 credit points – Level 3](#)

**Part B - Must select 2 of the following**

**Major in Applied Ecology (MJ0008) | 18 credit points**

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

[Plants and Animals \(623\) | 3 credit points – Level 1](#)

Integrated Catchment Science (10224) | 3 credit points – Level 2

Landscape Processes (10225) | 3 credit points – Level 2

Freshwater Biology (10226) | 3 credit points – Level 2

Ecology (10231) | 3 credit points – Level 2

Conservation Ecology (10234) | 3 credit points – Level 3

**Major in Water Science (MJ0124) | 18 credit points**

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

Plants and Animals (623) | 3 credit points – Level 1

Ecochemistry (6915) | 3 credit points – Level 2

Integrated Catchment Science (10224) | 3 credit points – Level 2

Landscape Processes (10225) | 3 credit points – Level 2

Freshwater Biology (10226) | 3 credit points – Level 2

Spatial Analysis (10230) | 3 credit points – Level 3

- This course is being reviewed and new majors will be available from 2022.

**Suspended Majors - May select from**

**Major in Environmental Chemistry (MJ0179) | 18 credit points**

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

Chemistry 1a (1516) | 3 credit points – Level 1

Chemistry 1b (1517) | 3 credit points – Level 1

Ecochemistry (6915) | 3 credit points – Level 2

Analytical Chemistry (8043) | 3 credit points – Level 2

Environmental and Forensic Geochemistry (10002) | 3 credit points – Level 3

Freshwater Biology (10226) | 3 credit points – Level 2

**Major in Environmental Genetics (MJ0194) | 18 credit points**

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

Concepts in Biology (483) | 3 credit points – Level 1

Chemistry 1a (1516) | 3 credit points – Level 1

Molecular and Cellular Biology (8375) | 3 credit points – Level 2

Environmental and Forensic Genetics (10001) | 3 credit points – Level 3

Genetics and Genomics (10223) | 3 credit points – Level 2

**Restricted Choice - Must pass 3 credit points from the following**

Biochemistry (6530) | 3 credit points – Level 2

Biostatistics (10222) | 3 credit points – Level 2

**Major in Integrated Environmental Management (MJ0060) | 18 credit points**

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

Environmental and Planning Law (7907) | 3 credit points – Level 2

Integrated Catchment Science (10224) | 3 credit points – Level 2

Understanding Environmental Complexity (10228) | 3 credit points – Level 2

Spatial Analysis (10230) | 3 credit points – Level 3

Environmental Conflict and Engagement (10232) | 3 credit points – Level 3

Tackling Environmental Challenges (10235) | 3 credit points – Level 3

#### Major in Earth Science (21cp) (MJ0301) | 21 credit points

##### Required - Must pass 21 credit points as follows

Chemistry 1b (1517) | 3 credit points – Level 1

Analytical Chemistry (8043) | 3 credit points – Level 2

Earth System Science (8101) | 3 credit points – Level 1

Environmental and Forensic Geochemistry (10002) | 3 credit points – Level 3

Integrated Catchment Science (10224) | 3 credit points – Level 2

Landscape Processes (10225) | 3 credit points – Level 2

Spatial Analysis (10230) | 3 credit points – Level 3

#### Major in Sustainable Landscapes (MJ0300) | 18 credit points

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

Plants and Animals (623) | 3 credit points – Level 1

Earth System Science (8101) | 3 credit points – Level 1

Landscape Systems (8273) | 3 credit points – Level 3

Integrated Catchment Science (10224) | 3 credit points – Level 2

Landscape Processes (10225) | 3 credit points – Level 2

##### Restricted Choice - Must pass 3 credit points from the following

Indigenous Heritage and Landscapes (9634) | 3 credit points – Level 3

Spatial Analysis (10230) | 3 credit points – Level 3

Note:

- These majors are closed to new students commencing from 2021.

#### Open Electives - 9 credit points as follows

- In choosing electives students should note that no more than 30 credit points at Level 1 is permitted for the entire course.

Note:

- Must pass 9 credit points from any part of the University as a major, minor and/or as individual units.

In addition to course requirements, in order to successfully complete your course you may need to 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

Chemistry 1a (1516)

Communication in Science (4732)

Concepts in Biology (483)

##### Semester 2

Open Elective Unit

Data Analysis in Science (1809)

Earth System Science (8101)

Mathematical Methods (577)

Plants and Animals (623)

Year 2

Semester 1

Four Environmental Science Major Units or  
Environmental Science Major Units and Open Elective

Semester 2

Four Environmental Science Major Units or Three  
Environmental Science Major Units and Open Elective

Year 3

Semester 1

Four Environmental Science Major Units or  
Environmental Science Major Units and Open Elective

Semester 2

Three [Tackling Environmental Challenges \(10235\)](#)  
Two Environmental Science Major Units

Standard Full Time, Semester 2 Commencing

Year 1

Semester 2

[Plants and Animals \(623\)](#)

Open Elective Unit

[Data Analysis in Science \(1809\)](#)

[Earth System Science \(8101\)](#)

Year 2

Semester 1

[Chemistry 1a \(1516\)](#)

[Communication in Science \(4732\)](#)

[Concepts in Biology \(483\)](#)

[Mathematical Methods \(577\)](#)

Semester 2

Three Environmental Science Major Units

Open Elective Unit

Year 3

Semester 1

Four Environmental Science Major Units or  
Environmental Science Major Units and Open Elective

Semester 2

Three Environmental Science Major Units or Two  
Environmental Science Major Units and One Open Elective  
Unit

[Tackling Environmental Challenges \(10235\)](#)

Year 4

Semester 1

Three Environmental Science Major Units or Two Environmental Science Major Units and One Open Elective Unit

## Course information

### Course duration

Standard six semesters full-time or equivalent. Maximum twenty semesters.

### Learning outcomes

Learning outcomes	Related graduate attributes
1. Design and evaluate strategies, technologies, and methods for sustainable management of environmental systems;	UC graduates are professional:  Employ up-to-date and relevant knowledge and skills; and  Use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems.
2. Understand the natural environment in both a local and global context and its relationships with human activities;	UC graduates are global citizens:  Think globally about issues in their profession.
3. Acquire practical skills for scientific problem-solving, including familiarity with laboratory and field instrumentation, computer applications, statistical and modelling techniques;	UC graduates are lifelong learners:  Reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development; and  Evaluate and adopt new technology.
4. Understand professional and environmental ethics;	UC graduates are professional:  Take pride in their professional and personal integrity.  UC graduates are global citizens:  Behave ethically and sustainably in their professional and personal lives.  UC graduates are lifelong learners:  Be self-aware.
5. Understand interactions among plant, animal, and abiotic features of ecosystems;	



<p>6. Understand the expected consequences of implementing a research, design, or management plan and be able to explain them;</p>	<p>UC graduates are professional:  Communicate effectively.</p>
<p>7. Development of skills suitable for a wide range of careers in industry, government, private consulting firms, non-profit organisations, and educational institutions;</p>	
<p>8. Become effective communicators of environmental science as scientific results, information or arguments, to a range of audiences, for a range of purposes, with particular focus on the decisions and values of indigenous people;</p>	<p>UC graduates are professional:  Communicate effectively.  UC graduates are global citizens:  Understand issues in their profession from the perspective of other cultures; and  Communicate effectively in diverse cultural and social settings.</p>
<p>9. Become independent and self-directed learners; working effectively, responsibly and safely in an individual or team context; and demonstrating knowledge of the regulatory frameworks relevant to their disciplinary area and personally practising ethical conduct.</p>	<p>UC graduates are professional:  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 lifelong learners:  Be self-aware.</p>

## Majors

- [Major in Earth Science \(21cp\) \(MJ0301\)](#)
- [Major in Water Science \(MJ0124\)](#)
- [Major in Sustainable Landscapes \(MJ0300\)](#)
- [Major in Environmental Genetics \(MJ0194\)](#)
- [Major in Applied Ecology \(MJ0008\)](#)
- [Major in Environmental Chemistry \(MJ0179\)](#)
- [Major in Integrated Environmental Management \(MJ0060\)](#)

## Awards

Award	Official abbreviation
-------	-----------------------

Bachelor of Environmental Science

B EnvSc

## Honours

None.

## Enrolment data

2020 enrolments for this course by location. Please note that enrolment numbers are indicative only and in no way reflect individual class sizes.

Location	Enrolments
UC - Canberra, Bruce	131

## Enquiries

Student category	Contact details
Prospective Domestic Students	Email <a href="mailto:study@canberra.edu.au">study@canberra.edu.au</a> or Phone 1800 UNI CAN (1800 864 226)
Prospective International Students	Email <a href="mailto:international@canberra.edu.au">international@canberra.edu.au</a> or Phone +61 2 6201 5342
Current and Commencing Students	Please contact the University Student Centre by Email <a href="mailto:estem-courseadvice@canberra.edu.au">estem-courseadvice@canberra.edu.au</a> or Phone 1300 301 727

Printed on 27, October, 2021

University of Canberra, Bruce ACT 2617 Australia

+61 2 6201 5111

ABN 81 633 873 422

CRICOS 00212K

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.