



Australian  
National  
University

# Undergraduate Student Guide

ANU College of Science

TURN YOUR PASSION INTO YOUR CAREER

Career possibilities

Degree options

Areas of study that I enjoy

Environment, Earth & Marine Sciences

Health & Psychology

Maths

Biology

Physics

Chemistry

- Environmental Consultant/Engineer/Chemist
- Soil Scientist
- Urban Planner
- Conservation Officer
- Waste and Water Resource Specialist
- Eco-tourism Planner
- International Development Consultant
- Fire Consultant
- Forester
- Environmental Reporter
- Geologist
- Oceanographer
- Geophysicist
- Geobiologist/Chemist
- Marine Biologist
- Seismologist
- Sustainability and Climate Consultant
- Science Journalist/Communicator
- Teacher

- Bank Manager
- Budget Analyst
- Computer/Software Programmer
- Database Developer
- Epidemiologist
- Investment Banker
- Logistics Specialist
- Market Research Analyst
- Mathematician
- Numerical Analyst
- Statistician
- Professor
- Researcher
- Bioinformaticist
- Economist
- Teacher

- Astronomer
- Astrophysicist
- Biophysicist
- Plasma Scientist
- Physicist
- Environmental/Optical/Particle Physicist
- Instrument Designer
- Robotics Technician
- Systems Analyst
- Material Scientist
- Meteorologist
- Nanotechnologist
- Nuclear Physicist
- Photon Scientist
- Science Journalist/Communicator
- Teacher

- Dietitian
- Pharmacist
- Physiotherapist
- Genetic Counsellor
- Health Policy Adviser
- Laboratory Technician
- Health Administrator
- Behavioural Therapist
- Mental Health Counsellor
- Psychologist/Psychiatrist
- School Counsellor
- Child and Youth Worker
- Social Worker
- Human Resources Specialist
- Organisational Psychologist
- Doctor/General Practitioner
- Medical Specialist/Clinician e.g. Pediatrician, Cardiologist, Surgeon
- Immunologist
- Medical Researcher
- Police and Public Safety Officer
- Forensic Scientist/Psychologist
- Rehabilitation Counsellor
- Teacher

- Bachelor of Genetics
- Bachelor of Biotechnology
- Bachelor of Medical Science
- Bachelor of Health Science
- Bachelor of Psychology (Honours)
- Bachelor of Science (Psychology)
- Bachelor of Science (Advanced) (Honours)
- Bachelor of Philosophy (Honours)
- Bachelor of Science

- Bachelor of Science
- Bachelor of Genetics
- Bachelor of Biotechnology
- Bachelor of Medical Sciences
- Bachelor of Health Science
- Bachelor of Science (Advanced) (Honours)
- Bachelor of Philosophy (Honours)
- Biochemist
- Botanist
- Forensic Scientist
- Entomologist
- Ecologist
- Science Magazine Editor/Writer
- Wildlife Biologist
- Microbiologist
- Conservation Biologist
- Biomedical Scientist/Researcher
- Immunologist
- Animal Behaviourist
- Biotechnologist
- Biochemical Geneticist
- Clinical Researcher
- Food and Drug Inspector
- Teacher

- Bachelor of Science (Advanced) (Honours)
- Bachelor of Philosophy (Honours)
- Biochemist
- Chemical Engineer
- Pharmaceutical Chemist
- Textile Chemist
- Radiochemist
- Teacher
- Pharmacologist
- Researcher
- Art Conservator
- Pharmacist
- Science Journalist/Communicator
- Developmental Chemist
- Pathologist
- Astrochemist
- Patent Agent
- Chemical Physicist
- Nanotechnologist

# OUR DEGREES

Degree name	Duration (full time)	Semester intake	Recommended cut-off		Prerequisites	UAC code	CRICOS code	Page
			ATAR	IB				
Bachelor of Biotechnology	3 years	1	80	29	Chemistry †	138503	036660M	3
Bachelor of Environment & Sustainability	3 years	1 & 2	80	29		138201	091180D	4
Bachelor of Genetics	3 years	1	85	32	Chemistry †	138600	064778J	5
Bachelor of Mathematical Sciences	3 years	1	95	38	Specialist mathematics/ Mathematics Extension 2‡	138200	086223G	6
Bachelor of Medical Science	3 years	1	85	32	Chemistry †	138403	036662J	7
Bachelor of Philosophy (Honours) (PhB)	4 years	1 & 2	99	43	Submission of a supplementary form  Some subjects require prior knowledge	138000	043746B	8
Bachelor of Science	3 years	1 & 2	80	29	Some subjects require prior knowledge	138003	000335K	9
Bachelor of Science (Advanced) (Honours)	4 years	1 & 2	90	34	Some subjects require prior knowledge	138004	065138M	9

† The chemistry bridging course is offered by the ANU Research School of Chemistry: [chemistry.anu.edu.au/study/bridging-course](http://chemistry.anu.edu.au/study/bridging-course)

‡ The mathematics bridging course is offered by the ANU Mathematical Sciences Institute: [maths.anu.edu.au/study/bridging-course](http://maths.anu.edu.au/study/bridging-course)

Please note that this student guide is correct as at time of printing in June 2024 and should be used as a guide only. For the most up-to-date information please visit the ANU website.

# BRIDGING COURSES

If the program you are interested in studying requires completion of mathematics or chemistry, you have the option of completing a bridging course. For applicants who have not completed the prerequisites, bridging courses can give you the equivalent skills.

## Chemistry:

This course specifically targets high school and college level students who wish to strengthen their chemistry knowledge with the aim of pursuing first-year chemistry. It aims to lay a good theoretical and practical foundation for first-year chemistry studies. Undergraduates or graduates who wish to improve their knowledge of chemistry may also enrol, and will benefit from the course structure and principles.

The course will focus on the fundamental principles of chemistry. The topics covered will include the study of atomic structure and periodicity, chemical bonding, nomenclature, the mole and stoichiometry, equation writing, and simple organic compounds. Students will also have the opportunity to develop some essential laboratory skills.

The course consists of eight lectures, tutorials, and laboratory sessions. It will be held in February in the Research School of Chemistry, The Australian National University, Canberra ACT. The course is not assessed by an examination, but successful completion of the course requires attendance at all lectures, tutorials, and laboratory sessions of the eight-day course.

The course consists of eight days of lectures, tutorials and laboratory sessions. It will be held from Wednesday 29 January to Friday 7 February 2025 (excluding the weekend) in the Research School of Chemistry (Teaching Division), The Australian National University.

Indicative course cost: \$600

The chemistry bridging course is offered through the ANU Research School of Chemistry  
[chemistry.anu.edu.au/study/bridging-course](http://chemistry.anu.edu.au/study/bridging-course).

## Mathematics:

The Bridging Course modules have been specifically designed to cover the prerequisite knowledge required to undertake the following First-Year maths courses:

- Mathematics and Applications 1(MATH1003) or Discrete Mathematical Models (MATH1005/MATH6005)
- Mathematics and Applications 1 (MATH1013)
- Advanced Mathematics and Applications 1 (MATH1115)
- Mathematical Foundations for Actuarial Studies (MATH1113)

There are 3 separate Bridging Modules that will run from early January to early February 2025. They range in cost between \$500-600 and run for 8-9 days.

Students who later enrol in a mathematics course at the ANU, can apply for a refund of AUD \$100 per module by contacting the Bridging Course administrator

## Who should enrol in the Bridging Course modules?

Students who are required to take one of the First-Year maths courses above as part of their degree program, but who do not have the prerequisite knowledge, are required to complete one or more of the bridging modules. Students who have the prerequisites but would like a refresh their knowledge, are welcome to enrol in the bridging modules.

Please note: It is mandatory for students to complete the diagnostic test prior to enrolling in any of the Bridging Modules.

The mathematics bridging course is offered through the ANU Mathematical Sciences Institute  
[maths.anu.edu.au/study/bridging-course](http://maths.anu.edu.au/study/bridging-course).

# BACHELOR OF BIOTECHNOLOGY



## Key facts

**Minimum entry requirements:** 80 ATAR, 29 IB

For further details on admission requirements please see pages 15-17.

Chemistry prerequisite. See page 2 for more information on the bridging course.

**Duration:** 3 years full-time

**Intake:** Semester 1 only

The Bachelor of Biotechnology can also be taken as part of a Flexible Double Degree or Vertical Double Degree pathway. See pages 12-14 for more information.

**UAC code:** 138503

**CRICOS code:** 036660M

## Program overview

Biotechnology is a fast-moving field where scientists use living organisms, and their products, to solve real world problems facing modern society. This exciting field has broad applications in medicine, biology, agriculture, manufacturing, renewable energy and engineering.

You will learn the foundations of biology, from genes through to ecology, while examining important questions about ethics and intellectual property.

## Career outcomes

Our Bachelor of Biotechnology graduates are highly sought after by government and industry employers in chemical, plant and agricultural, and medical biotechnology. You may also find positions in hospitals, food and pharmaceutical industries, or continue on to a career in research.

## Degree structure

Year	Semester	Course 1	Course 2	Course 3	Course 4
1	1	Biology 1: Evolution, Ecology and Genetics	Chemistry 1	Elective	Elective
	2	Biology 2: Molecular and Cell Biology	Chemistry 2	Elective	Elective
2	1	Genes: Replication and Expression	Chemical Biology 1	Biotechnology elective	Elective
	2	Molecular Gene Technology	Biotechnology elective	Biotechnology elective	Elective
3	1	Genomics and its Applications	Bioethics and Society	3000 level BIOL/CHEM/NEUR course	Elective
	2	3000 level BIOL course	3000 level BIOL/CHEM/NEUR course	3000 level BIOL/CHEM/NEUR course	Elective

\*Example study plan is a suggestion on how this program can be structured.



## Dr Kai Chan

### Bachelor of Biotechnology

After completing his Bachelor of Biotechnology and his PhD at ANU, Dr Chan was named ACT Scientist of the Year. He now leads the Plant Organelle and Cellular Signalling research group at the ANU Research School of Biology.

#1 in Australia for Natural Sciences\*

\*QS World University Rankings 2024

# BACHELOR OF ENVIRONMENT & SUSTAINABILITY



## Key facts

**Minimum entry requirements:** 80 ATAR, 29 IB

For further details on admission requirements please see pages 15-17.

**Duration:** 3 years full-time

**Intake:** Semester 1 & 2 (commencing your studies in semester 2 may limit course choices)

The Bachelor of Environment & Sustainability can also be taken as part of a Flexible Double Degree or Vertical Double Degree pathway. See pages 12-14 for more information.

**UAC code:** 138201

**CRICOS code:** 091180D

## Program overview

The Bachelor of Environment & Sustainability is a contemporary degree, covering environmental science, policy and social sciences, allowing you to address the complex challenges of sustainability by giving you a broad environmental education.

## Career outcomes

Work on environment and sustainability issues in a range of global, national and local contexts.

- > Policymaking within government
- > Water resources management
- > Environmental management
- > Fire management
- > International development
- > Food security consulting
- > Climate change consulting
- > Urban planning and sustainability



### Jharna Chamlagai

**Bachelor of Environment and Sustainability and Bachelor of Laws (Honours)**

"I really liked the intersection of environment, which is hands-on, and law, which is quite textbook. Looking at climate policy and climate action, it was really great to consider what are the legal activities that we could be doing in this space?"

#1 in Australia for Natural Sciences\*  
\*QS World University Rankings 2024

5 star rating for Environmental Studies\*\*  
\*\*Good Universities Guide

## Degree structure

Year	Semester	Course 1	Course 2	Course 3	Course 4
1	1	Introduction to Environmental and Social Research	Sustainable Development	Foundational course list	Elective
	2	Elective	Elective	Foundational course list	Elective
2	1	Human Ecology	Indigenous Cultural and National Resource Management	Specialisation course	Skill development course
	2	Elective	Elective	Specialisation course	Skill development course
3	1	Environmental Policy	Elective	3000 level specialisation course	3000 level skill development course
	2	Complex Environmental Problems in Action	Elective	3000 level specialisation course	Elective

\*Example study plan is a suggestion on how this program can be structured.

# BACHELOR OF GENETICS



## Key facts

**Minimum entry requirements:** 85 ATAR, 32 IB

For further details on admission requirements please see pages 15-17.

Chemistry prerequisite. See page 16 for more information on the bridging course.

**Duration:** 3 years full-time

**Intake:** Semester 1 only

65% minimum average required throughout degree.

The Bachelor of Genetics can also be taken as part of a Flexible Double Degree or Vertical Double Degree pathway. See pages 12-14 for more information.

**UAC code:** 138600

**CRICOS code:** 064778J

## Program overview

In this program you'll learn how genes hold our hereditary information, study classical genetics, molecular genetics, population genetics, and bioinformatics. You can even follow interests in areas as diverse as plant genetics, evolutionary genetics or medicine and health.

## Career outcomes

Our graduates have gone on to positions at:

- > Medical and agricultural research institutes
- > Hospitals
- > Government departments
- > Schools and universities
- > Patent firms
- > Genetic counselling services
- > Forensic laboratories, and
- > Biotechnology companies.

## Degree structure

Year	Semester	Course 1	Course 2	Course 3	Course 4
1	1	Biology 1: Evolution, Ecology and Genetics	Chemistry 1	Elective	Elective
	2	Biology 2: Molecular and Cell Biology	Chemistry 2	Diversity of Life	Elective
2	1	Genes: Replication and Expression	Genetics	BIOL2001 or COMP1730	Elective
	2	Experimental Design and Analysis in Biology	Molecular Gene Technology	Elective	Elective
3	1	Genomics and its Applications	3000 level Genetics Elective	Genetics of Human Disease 1	Elective
	2	3000 level Genetics Elective	3000 level Genetics Elective	2000-3000 level BIOL, MEDN or NEUR course	Elective

\*Example study plan is a suggestion on how this program can be structured.



## STUDENT PROFILE

### Amber Condell

#### Bachelor of Genetics

ANU is one of the only universities with a specific genetics undergraduate program, and Amber says that when she saw there was also the opportunity to do an internship in genetic counselling at Canberra Hospital, that sealed the deal.

"The internship was one of the greatest weeks of my life. It was an amazing experience. You've studied all this theory in class and gotten caught up in the technical lab work, and now it's time to go to meetings with patients and see that this is someone's real life. These are their real genes and emotions."

 #1 in Australia for Natural Sciences\*  
\*QS World University Rankings 2024

# BACHELOR OF MATHEMATICAL SCIENCES



## Key facts

**Minimum entry requirements:** 95 ATAR, 38 IB

For further details on admission requirements please see pages 15-17.

**Duration:** 3 years full-time

**Intake:** Semester 1 only

70% minimum average required in math coded courses throughout degree.

Maths prerequisite. See page 2 for more information on the bridging course.

**UAC code:** 138200

**CRICOS code:** 086223G

## Program overview

If you'd like to master quantitative problem-solving, mathematical modelling and critical thinking, this is the degree for you. It is an elite, research-focused program for exceptional students at Australia's highest-ranked university.

## Career outcomes

This degree is designed for students who want a career based in the quantitative modelling of the real world, a research-oriented career in government, commerce or industry, or who are interested in pursuing postgraduate studies.

Our mathematics graduates have gone on to positions at:

- > **CSIRO**
- > **Bureau of Meteorology**
- > **Geosciences Australia**
- > **Australian Signals Directorate**
- > **Macquarie Bank**
- > **Boston Consulting**
- > **Treasury**
- > **Australian Tax Office, and**
- > **Google**



## GRADUATE PROFILE

### Yunfei Ouyang

#### Bachelor of Mathematical Sciences

"In my second year I completed an internship with the Department of Infrastructure as a data analyst. I analysed a lot of shipping data – specifically to do with the container shipping industry – and helped make infrastructure recommendations.

"Maths can be applied to so many pressing problems and it opens up many doors. Applying my quantitative skillset to unravel real world problems has been very satisfying."

#1 in Australia for Mathematics\*  
\*THE World University Rankings 2024

## Degree structure

Year	Semester	Course 1	Course 2	Course 3	Course 4
1	1	Advanced Mathematics and Applications 1	Science elective	Elective	Elective
	2	Advanced Mathematics and Applications 2	Science elective	Elective	Elective
2	1	Applied Mathematics I	Advanced Analysis 1: Metric Spaces and Applications	Science elective	Elective
	2	Advanced Algebra 1: Groups, Rings and Linear Algebra	Introduction to Mathematical Thinking: Problem-Solving and Proofs	Science elective	Elective
3	1	3000 level MATH course	3000 level MATH course	3000 level MATH course	Elective
	2	3000 level MATH course	3000 level MATH course	3000 level MATH course	Elective

\*Example study plan is a suggestion on how this program can be structured.

[science.anu.edu.au/study/bachelors/bachelor-mathematical-sciences](https://science.anu.edu.au/study/bachelors/bachelor-mathematical-sciences)

# BACHELOR OF MEDICAL SCIENCE



## Key facts

**Minimum entry requirements:** 85 ATAR, 32 IB

For further details on admission requirements please see pages 15-17.

**Duration:** 3 years full-time

**Intake:** Semester 1 only

65% minimum average required throughout degree

The Bachelor of Medical Science can also be taken as part of a Flexible Double Degree or Vertical Double Degree pathway. See pages 12-14 for more information.

Chemistry prerequisite. See page 2 for more information on the bridging course.

**UAC code:** 138403

**CRICOS code:** 036662J

## Program overview

This degree brings the disciplines of genetics, immunology, nutrition, physiology, microbiology, biochemistry and anatomy into a single degree.

The flexibility of the degree allows you to choose additional subjects in complementary disciplines such as neuroscience, psychology, molecular biology and ethics in order to develop your interests further.

## Career outcomes

You'll gain the fundamental knowledge of the medical sciences and skills in modern molecular, cellular and biotechnological techniques required to continue with postgraduate study in medicine or research. You can also pursue a career in pharmacy, physiotherapy, nutrition, dietetics, forensic science or health administration in the public or private sectors.

## Degree structure

Year	Semester	Course 1	Course 2	Course 3	Course 4
1	1	Biology 1: Evolution: Ecology & Genetics	Chemistry 1	Elective	Elective
	2	Biology 2: Molecular & Cell Biology	Chemistry 2	Elective	Elective
2	1	Medical Physiology and Pharmacology	Genes: Replication & Expression	Biochemistry & Nutrition	Quantitative Research Skills Course
	2	General Microbiology	2000 level Medical Science elective	2000 level Medical Science elective	Elective
3	1	3000 level Medical Science elective	3000 level Medical Science elective	Elective	Elective
	2	Medical Science in the Workplace	3000 level Medical Science elective	3000 level Medical Science elective	Elective

\*Example study plan is a suggestion on how this program can be structured.



## GRADUATE PROFILE

### Alex Keen

#### Bachelor of Medical Science

Alex studied a Bachelor of Medical Science focussing on human-based biology and physiology.

"I've always liked medicine and find it really interesting, understanding how the human body works and therefore being able to assist someone who needs help."

# BACHELOR OF PHILOSOPHY (HONOURS) (PHB)



## Key facts

**Minimum entry requirements:** 99 ATAR, 43 IB

For further details on admission requirements please see pages 15-17.

**Duration:** 4 years full-time

**Intake:** Semester 1 & 2 (commencing your studies in Semester 2 may limit course choices)

75% minimum average required in science courses throughout degree. 70% minimum average required in 36 units of courses in disciplines cognate to the honours specialisation excluding 1000-level courses. 80% minimum final Honours mark in order to graduate with the Bachelor of Philosophy (Honours).

Honours (one year of research and a thesis)

Some subjects have assumed knowledge, particularly in chemistry, mathematics and physics. See page 2 for more information on bridging courses.

**UAC code:** 138000

**CRICOS code:** 043746B

## Program overview

There's no other degree like it in Australia. Explore your interests by undertaking research as an undergraduate student and receiving one-on-one mentoring by leading academics, all while enjoying the camaraderie of a group of like-minded students.

## Career outcomes

Many of our graduates have used the PhB program as a pathway to completing PhDs in some of the best universities around the world. The PhB can also provide a pathway to the Doctor of Medicine and Surgery (MChD) without having to sit the GAMSAT.

## Degree structure

Year	Semester	Course 1	Course 2	Course 3	Course 4
1	1	Science 1000 level course	Science 1000 level course	Science 1000 level course	Elective
	2	Science 1000 level course	Science 1000 level course	Advanced Studies Extension	Elective
2	1	Science 2000 level course	Science 2000 level course	Advanced Studies Course	Elective
	2	Science 2000 level course	Advanced Studies Extension	Advanced Studies Extension	Elective
3	1	Science 3000 level course	Science 3000 level course	Advanced Studies Course	Elective
	2	Science 3000 level course	Science 3000 level course	Advanced Studies Course	Elective
4	1	Honours			
	2	Honours			

\*Example study plan is a suggestion on how this program can be structured.



## GRADUATE PROFILE

### Atul Sharma

#### Bachelor of Philosophy (Honours) (PhB)

"I had a unique experience during my Bachelor of Philosophy (Honours). It was broad, flexible, and in retrospect, more applicable even now as a third year Doctor of Medicine and Surgery student. The ability to slip into research projects was the key highlight. Research is the bedrock skill in many academic prospects, and a valuable experience when you reach the (daunting) job application seasons."

# BACHELOR OF SCIENCE



## Key facts

**Minimum entry requirements:** 80 ATAR, 29 IB

For further details on admission requirements please see pages 15-17.

**Duration:** 3 years full-time

**Intake:** Semester 1 & 2 (commencing your studies in Semester 2 may limit course choices)

The Bachelor of Science can also be taken as part of a Flexible Double Degree or Vertical Double Degree pathway. See pages 12-14 for more information.

Some subjects have assumed knowledge, particularly in chemistry, mathematics and physics. See page 2 for more information on bridging courses.

**UAC code:** 138003

**CRICOS code:** 000335K

## Program overview

Explore the possibilities of science from astronomy to zoology and everything in between with our most flexible science degree. Tailor a program to your unique interests while giving you critical-thinking and problem-solving skills needed for the workforce.

## Career outcomes

- > Policy advisor
- > Consultant
- > Science journalist
- > Science teacher
- > Environmental scientist
- > Research officer at scientific organisation (CSIRO)
- > Liaison officer at pharmaceutical company



## STUDENT PROFILE

### Tanya Javaid

#### Bachelor of Science (Advanced) (Honours)

Tanya Javaid is an international student studying a Bachelor of Science (Advanced) (Honours) at ANU and completed an internship at CSIRO as part of her degree.

“Getting caught up in the stress of grades and deadlines, you often forget to enjoy what you’re learning, and fail to see that information is used beyond the classroom. An internship is a great way to study what you love in a hands-on way, without obsessing over your grade at the end of it!”

 #1 in Australia for Natural Sciences\*  
\*QS World University Rankings 2024

## Degree structure

Year	Semester	Course 1	Course 2	Course 3	Course 4
1	1	Major	Minor	Elective	Elective
	2	Major	Minor	Elective	Elective
2	1	Major	Minor	Science Elective	Elective
	2	Major	Minor	Science Elective	Elective
3	1	Major	Major	Science Elective	Elective
	2	Major	Major	Science Elective	Elective

\*Example study plan is a suggestion on how this program can be structured.

## Bachelor of Science (Advanced) (Honours) option available

**Entry requirements:** 90 ATAR, 34 IB

**Duration:** 4 years full-time

**Intake:** Semester 1 & 2 (commencing your studies in Semester 2 may limit course choices)

70% minimum average required in science courses throughout degree

**UAC code:** 138004

**CRICOS code:** 065138M

### Program overview

The Bachelor of Science (Advanced) (Honours) has a higher entry requirement and students must complete the fourth Honours year, which consists of intensive research and a thesis.



# INTERNSHIPS



Apply for our official internship program to work in an organisation on an agreed project, earning course credit during a semester. As an intern, you will get hands on work experience that will put you ahead of the competition when it's time to graduate. And did we mention you'll get credit towards your degree?

The internship program is an opportunity for you to work in an organisation for 1-2 days a week in a semester. Opportunities may exist for intensive internships during semester breaks, with a greater time commitment over a shorter period. The number of internships available each semester is based on the number of available projects from host organisations.

## Current internship hosts

- > ACT Health
- > Australian Academy of Science
- > Australian Institute of Health & Welfare
- > Australian Science Innovations
- > Endangered Heritage
- > Esri Australia
- > Fight Food Waste Ltd
- > Food2Soil
- > NSW Biodiversity Conservation Trust
- > Relationships Australia
- > Safe Work Australia
- > Women's Mentoring Foundation

## Self-sourced internships

Students can undertake external internship opportunities if there is no existing formal agreement with the proposed host organisation. In self-sourced internships, students must meet the learning outcomes and other requirements to receive credit for their internship. Students must contact the internship course convener for further information before they undertake self-sourced internships.

E [science.internships@anu.edu.au](mailto:science.internships@anu.edu.au)

## Example of self-sourced internship

### CSIRO

- > Our students often work with leading CSIRO scientists in their world-class facilities, leading to further research and employment opportunities.

## Applications for internships

### Semester 1:

Applications open early December, close mid-January.

### Winter Semester/Semester 2:

Applications open late March, close mid April.



## Isaac Kozlovskis

### Bachelor of Arts / Bachelor of Science

Isaac completed an internship at the Australian Academy of Science as part of his double-degree.

"Halfway through my placement I was offered part-time work at the Academy. I then completed both my role as an employee and my work as an intern simultaneously.

I also think the relationships I developed with my colleagues are so invaluable. Not only have I learnt so much and advanced my professional network, I also made some fantastic friends."

## Eligibility

- > Domestic and international students may apply.
- > You must have completed a minimum of 72 units with at least a Distinction average in Science courses.
- > Postgraduate students require approval from their Postgraduate Program Convener.
- > Selection may include an interview.
- > Additional selection criteria may be set by the host organisation.

# FIELDWORK



A number of our courses offer fieldwork activities, across a range of science fields, to help you get hands-on experience in the field and assist you in solidifying your theoretic knowledge. Here are some fieldwork highlights you can undertake during your studies. Please note: some field trip course are capped due to capacity restrictions and are subject to travel restrictions.



## Coral Reef Field Studies

**EMSC3019**, offered by the Research School of Earth Sciences

Learn from ANU researchers on One Tree Island or Heron Island. Several days will be spent on location studying a modern reefal setting, fossil reef depositional environments and relevant biological processes.



## Environmental Science Field School

**ENVS2018**, offered by the Fenner School of Environment and Society

Apply your theoretical understanding to critical observation and measurement of biodiversity, biogeography, landscape ecology, soil-vegetation processes and sustainable land management.



## Field Studies in Functional Ecology

**BIOL2203**, offered by the Biology Teaching and Learning Centre

Understand field studies in plant and animal functional ecology. The course location varies each year but has previously been held in Singapore, Kosciuszko National Park and the Daintree Rainforest.



## Foundations of Astrophysics

**ASTR2013**, offered by the Research School of Astronomy and Astrophysics.

Learn about the key components of galaxies—dark matter, stars and gas, and how their masses and other properties are measured. Students will also gain practical experience with astronomical observations with a field trip to the Siding Spring Observatory.

[science.anu.edu.au/study/field-trips](http://science.anu.edu.au/study/field-trips)

# DEGREE PROGRAMS

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## Flexible Double Degrees

W [study.anu.edu.au/study-options/flexible-degree-options-anu](http://study.anu.edu.au/study-options/flexible-degree-options-anu)



## Bachelor degree + Bachelor degree

Study two undergraduate degrees at the same time and graduate with two qualifications.

- > **Double your job prospects**
  - > **It takes less time than studying two undergraduate degrees separately**
  - > **Same full-time workload per year as studying a single undergraduate degree**
- 

## Vertical Double Degree pathways

W [science.anu.edu.au/study/double-degrees/vertical-double-degree-pathways](http://science.anu.edu.au/study/double-degrees/vertical-double-degree-pathways)

W [health.anu.edu.au/study/double-degrees/vertical-double-degree-pathways](http://health.anu.edu.au/study/double-degrees/vertical-double-degree-pathways)



## Bachelor degree + Master degree

Expand your career options with two qualifications.

- > **In a Vertical Double Degree (VDD) pathway you can study a Bachelor and a Master in a shorter time.**
  - > **Typically takes four years to complete.**
  - > **Save on time and cost when compared with studying a Bachelor and Master separately.**
  - > **All Master of Science plans can be taken in the VDD pathway**
- 

### Science Bachelor options

- > **Biotechnology\***
- > **Environment & Sustainability**
- > **Genetics\***
- > **Medical Science**
- > **Science**

### Master options

- > **Environment**
  - > **Science Communication**
  - > **Science**
- 

\*Program includes another prerequisite in addition to selection rank.

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## What are majors, minors and specialisations?

Majors, minors and specialisations are groups of courses with a common theme that demonstrate you have concentrated your studies in a certain area. Each of the courses you take is worth a certain number of units, depending on how involved they are. Majors are 48 units, typically 8 courses, and are required to complete some degrees. Minors are 24 units, typically 4 courses. Specialisations also require 24 units but must be taken in conjunction with an associated major.

**Majors, minors and specialisations are only required in the following degrees:**

- > **Bachelor of Environment & Sustainability**
- > **Bachelor of Science**
- > **Bachelor of Science (Advanced) (Honours)**

# FLEXIBLE DOUBLE DEGREE COMBINATIONS

Looking for a degree with your name on it? Design your own flexible double degree. ANU offers more than 500 possible combinations.

## Arts, Social Sciences, Business or Science

### Four years full-time

Combine any two of the following degrees.

Bachelor of	2024 Selection Rank
Accounting <sup>2</sup>	80
Actuarial Studies <sup>4</sup>	92
Applied Data Analytics	90
Arts	80
Asian Studies	80
Biotechnology <sup>4,5</sup>	80
Business Administration	80
Commerce <sup>2,3</sup>	80
Criminology	80
Design	A+C
Economics	80
Environment and Sustainability	80
Finance <sup>3</sup>	80
Genetics <sup>4,5</sup>	85
International Relations	85
International Security Studies	85
Languages	80
Mathematical Sciences <sup>4</sup>	95
Medical Science <sup>4,5</sup>	85
Music <sup>1</sup>	80
Pacific Studies	80
Political Science	85
Politics, Philosophy and Economics	94
Science	80
Science (Psychology)	80
Statistics <sup>4</sup>	80
Visual Arts	A+C

## Law or Philosophy

### Five years full-time

Choose to study the Bachelor of Laws (Hons) or Bachelor of Philosophy (Hons) and combine it with a degree in another field.

Bachelor of	2024 Selection Rank
Laws (Hons)	97
Philosophy (Hons)	99
<b>with one of the following degrees</b>	
Actuarial Studies <sup>4</sup>	92
Applied Data Analytics	90
Arts	80
Asian Studies	80
Biotechnology <sup>4</sup>	80
Business Administration	80
Commerce	80
Criminology	80
Design	A+C
Economics	80
Environment and Sustainability	80
Finance	80
Genetics <sup>4</sup>	85
International Security Studies	85
Languages	80
Mathematical Sciences <sup>4</sup>	95
Medical Science <sup>4</sup>	85
Pacific Studies	80
Political Science	85
Politics, Philosophy and Economics	94
Science	80
Science (Psychology)	80
Statistics <sup>4</sup>	80
Visual Arts	A+C

## Engineering or Advanced Computing

### Five years full-time

Choose to combine Engineering or Advanced Computing with a degree in another field.

Bachelor of	2024 Selection Rank
Advanced Computing (Hons) <sup>4</sup>	85
Advanced Computing (R&D) (Hons) <sup>4,98</sup>	98
Engineering (Hons) <sup>4</sup>	85
Engineering (R&D) (Hons) <sup>4,6</sup>	98
<b>with one of the following degrees</b>	
Actuarial Studies <sup>4</sup>	92
Applied Data Analytics	90
Arts	80
Asian Studies	80
Biotechnology <sup>4</sup>	80
Business Administration	80
Commerce	80
Criminology	80
Design	A+C
Economics	80
Environment and Sustainability	80
Finance <sup>3</sup>	80
Genetics <sup>4</sup>	85
International Security Studies	85
Languages	80
Mathematical Sciences <sup>4</sup>	90
Medical Science <sup>4</sup>	85
Pacific Studies	80
Political Science	85
Politics, Philosophy and Economics	94
Science	80
Science (Psychology)	80
Statistics <sup>4</sup>	80
Visual Arts	A+C

A+C: completion of Year 12 certificate + conditions apply including interview/portfolio.  
See [soa.anu.edu.au/apply](http://soa.anu.edu.au/apply) for more information.

1 Entrance to performance courses are by audition. E [schoolofmusic@anu.edu.au](mailto:schoolofmusic@anu.edu.au)

2 Commerce with an accounting major cannot be combined with Bachelor of Accounting.

3 Commerce with a finance major cannot be combined with Bachelor of Finance.

4 Program includes another prerequisite in addition to minimum selection rank.

5 The degrees of Biotechnology, Genetics and Medical Sciences cannot be combined with one another.

6 The degree of Advanced Computing cannot be combined with The Bachelor of Engineering (R&D) (Hons).

# PUTTING THEM TOGETHER

The courses you take will depend on the structure of your degree and any majors or areas of specialisation you choose to focus on during your studies at ANU.

## Single Degree

e.g. Bachelor of Science

Year	Semester	Courses			
1	1	Science Major	Science Minor	Science Elective	Elective
	2	Science Major	Science Minor	Science Elective	Elective
2	1	Science Major	Science Minor	Science Elective	Elective
	2	Science Major	Science Minor	Science Elective	Elective
3	1	Science Major	Science Major	Science Elective	Elective
	2	Science Major	Science Major	Science Elective	Elective

## Flexible Double Degree

Four year double degree e.g. Bachelor of Science/Bachelor of Arts

Year	Semester	Courses			
1	1	Science Major	Science Minor	Arts Major	Arts Minor
	2	Science Major	Science Minor	Arts Major	Arts Minor
2	1	Science Major	Science Minor	Arts Major	Arts Minor
	2	Science Major	Science Minor	Arts Major	Arts Minor
3	1	Science Major	Science elective	Arts Major	Arts Elective
	2	Science Major	Science elective	Arts Major	Arts Elective
4	1	Science Major	Science elective	Arts Major	Arts Elective
	2	Science Major	Science elective	Arts Major	Arts Elective

## Vertical Double Degree pathway\*

Four year vertical double degree pathway e.g. Bachelor of Science & Master of Science -generic study plan based on a Major and Minor and non specified Master degree

Year	Semester	Courses			
1	1	Bachelor (Major)	Bachelor (Minor)	Bachelor ANU Elective	Bachelor ANU Elective
	2	Bachelor (Major)	Bachelor (Minor)	Bachelor ANU Elective	Bachelor ANU Elective
2	1	Bachelor (Major)	Bachelor (Major)	Bachelor (Minor)	Bachelor Science Elective
	2	Bachelor (Major)	Bachelor Science Elective	Bachelor (Minor)	Bachelor Science Elective
3	1	Bachelor (Major)	Bachelor (Major)	Master	Master
	2	Bachelor (Major)	Bachelor Science Elective	Master	Master
4	1	Master	Master	Master	Master
	2	Master	Master	Master	Master

\*Please note you can opt to complete a specialisation instead of a minor, a second Science major or another minor/specialisation as per the program requirements outlined on the Programs and Courses website - Semester 1 start

# HOW TO APPLY



## Domestic Undergraduate

You are a domestic applicant if you:

- are an Australian or New Zealand citizen
- hold an Australian Permanent Residency Visa
- hold an Australian Humanitarian Visa.

### ANU Direct application:

You can apply direct to the university if you:

- have completed Australian Year 11 studies or the International Baccalaureate program for Year 11
- will complete Australian Year 12 studies with an ATAR or an International Baccalaureate Diploma.

Direct applications are open March to May, to begin studies in February the following year. Your direct application will cover admissions, scholarships and campus accommodation.

If your Year 11 results don't meet entry requirements, we will put you on our waiting list and automatically consider your application again based on your Year 12 results in the December/ January offer round.

See [study.anu.edu.au/apply](http://study.anu.edu.au/apply) for further information.

### Applying through UAC:

You can apply to study at The Australian National University through the Universities Admissions Centre (UAC). Through UAC you can submit your preferences and provide any required documents to support your applications.

Visit the UAC website for further information [uac.edu.au](http://uac.edu.au).

## International Undergraduate

You can apply direct to ANU through the online application portal.

To be considered for an offer, you must meet the prerequisite and cognate requirements for your preferred program, as well as the English language requirements.

For the most up-to-date information about English language requirements, go to [study.anu.edu.au/apply/english-language-requirements](http://study.anu.edu.au/apply/english-language-requirements).

Your application will be ranked against other candidates applying for the same program.

You can apply at any time throughout the year. Most applications submitted before the 15th day of each month will be considered for an offer on the 1st day of the following month.

You can change your degree preference between the 9th and 15th day of each month.

You will have two months to accept your offer from ANU.

You can also consider seeking support from one of our educational agents. To find an education agent, go to [study.anu.edu.au/apply/international-applications/find-education-agent](http://study.anu.edu.au/apply/international-applications/find-education-agent).

## ONLINE DROP IN SESSIONS



Do you have questions about studying science, application process, scholarships, internships and student experiences and others?

The monthly drop-in sessions are designed to provide you with an opportunity to meet and talk to our senior student ambassador and course adviser and have your questions answered live.

Scan the QR code to see the dates and register.

# FEES & PATHWAYS



## Fees

Australian domestic undergraduate students are eligible for a Commonwealth Supported Place (CSP). This means that your tuition fees are subsidised by the Australian Government.

University tuition fees are charged based on your enrolment. Fees are not a set amount based on the degree you take, each course you enrol in has an associated fee that may be different to your other courses. From year to year tuition fee rates change. They can change for a number of reasons including those set by the University and those set by the Australian government. Specific course fee amounts are listed in the relevant course entry at [programsandcourses.anu.edu.au](https://programsandcourses.anu.edu.au)

For the most up-to-date information about university tuition fees in Australia for domestic students, go to [studyassist.gov.au](https://studyassist.gov.au)

## Fee help and financial assistance

Financial help is available to eligible students from the Australian Government through various schemes.

**HECS-HELP** is a loan program to help eligible students pay their student contribution. For details head to [studyassist.gov.au](https://studyassist.gov.au)

**Youth Allowance** is financial help available to eligible full-time students aged between 16 and 24 years of age. For details go to [humanservices.gov.au/individuals/services/centrelink/youth-allowance-students-and-australian-apprentices](https://humanservices.gov.au/individuals/services/centrelink/youth-allowance-students-and-australian-apprentices)

**ABSTUDY** is available to eligible Aboriginal and Torres Strait Islander students. For details go to [humanservices.gov.au/individuals/services/centrelink/abstudy](https://humanservices.gov.au/individuals/services/centrelink/abstudy)

**SA-HELP** is available to enable eligible students at ANU and other Australian universities to defer paying the Student Services and Amenities Fee (SA fee). For details go to [studyassist.gov.au/help-loans/sa-help](https://studyassist.gov.au/help-loans/sa-help)

For up-to-date information about the Student Services and Amenities Fee go to [anu.edu.au/students/program-administration/costs-fees/services-amenities-fee](https://anu.edu.au/students/program-administration/costs-fees/services-amenities-fee)

## Bridging courses

If the program you are interested in in studying requires completion of mathematics or chemistry, you have the option of completing a bridging course. For applicants who have not completed the prerequisites, bridging courses can give you the equivalent skills.

The chemistry bridging course is offered through the ANU Research School of Chemistry [chemistry.anu.edu.au/study/bridging-course](https://chemistry.anu.edu.au/study/bridging-course)

The mathematics bridging course is offered through the ANU Mathematical Sciences Institute [maths.anu.edu.au/study/bridging-course](https://maths.anu.edu.au/study/bridging-course)

## Transferring from another University

Transferring between universities is almost the same as applying for the first time. That means you will need to apply through UAC (see How to apply). If you have completed one year or more at another university you will be assessed on the basis of your tertiary results.

## Mature age entry

If you are not a recent school-leaver, you might qualify for mature age or adult entry. You may still qualify for admission to ANU on the basis of previous studies.

There are a number of pathways into university studies for the mature-aged student. Consider the ANU Special Adult Entry Scheme.

More information about the various mature age entry options can be found at [students.anu.edu.au/applications/mature](https://students.anu.edu.au/applications/mature)

## Honours pathway

You may undertake Honours if you are currently studying in a science program at ANU (in which Honours is not compulsory), or are completing your undergraduate degree in a science discipline at another university.

Students must meet the requirements for the first three years of their program and achieve a minimum 70% weighted average mark (WAM). This WAM is calculated from 36 units of courses in disciplines cognate to the Honours specialisation (excluding 1000-level courses) with the highest marks. You must also satisfy any requirements specified in the relevant Honours specialisation (see table below to link to Programs and Courses).

An Honours year is typically a fourth year of study that is a continuation of an undergraduate degree. The Science Honours specialisation is intended for students who have a broad and interdisciplinary training in science and are interested in undertaking an independent research project that crosses standard disciplinary boundaries. The honours specialisation is usually taken full time for two consecutive semesters and includes research training, in-depth analysis of current concepts in the fields as well as a substantial research project culminating in the production of a thesis. Honours is a solid foundation in the basics of research and can be an entry into many careers both within and outside of science.

More information about honours can be found at [students.science.anu.edu.au/program-admin/pathways-honours](https://students.science.anu.edu.au/program-admin/pathways-honours)

## Scholarships

Go to [study.anu.edu.au/scholarships](https://study.anu.edu.au/scholarships) for our full range of scholarship and eligibility requirements, or scan the QR code below.



# ADJUSTMENT FACTORS

## You may be eligible to receive adjustment factors.

You may be eligible to receive adjustment factors which could boost your ANU selection rank.

ANU allocates National Access Scheme adjustment factors for high achievement in strategic senior secondary subjects and in recognition of difficult circumstances faced during high school.

Learn more at [study.anu.edu.au/apply/national-access-scheme](http://study.anu.edu.au/apply/national-access-scheme)

We may consider you for adjustment factors if you have:

- > applied directly to ANU or through UAC for an eligible ANU bachelor program
- > undertaken the Australian Year 12 certificate or International Baccalaureate diploma
- > achieved an ATAR or equivalent of 70 or above
- > not previously attempted tertiary study.

For more information, visit the adjustment factors page on the ANU website.

## Educational Access Scheme (EAS) schedule for domestic students

EAS type	Equity adjustments	EAS category and description
Financial hardship	Up to 6	F01A – Youth Allowance/Austudy/Abstudy
	Up to 6	F01B – Other Centrelink income
	Up to 6	F01C – Exceptional financial hardship
	6	F01D – Parental Family Tax Benefit Part A
Severe family disruption	Up to 5	H01A – Death of immediate family member/close friend
	Up to 5	H01B – Life-threatening or severe illness of immediate family
	Up to 5	H01C – Divorce or separation of parents or applicant
	Up to 5	H01D – Legal matters
	6	H04B – Currently or previously placed with an OOHC provider
Refugee status	6	R01A – Refugee status

**Disclaimer:** Correct at time of print June 2023. Adjustment factors are reviewed annually, please refer to [study.anu.edu.au/apply/national-access-scheme](http://study.anu.edu.au/apply/national-access-scheme) and the Educational Access Scheme website for extended category descriptions and required supporting documentation.

\*Applicants applying for this disadvantage code within the ANU's direct application system may be eligible for impacts experienced during Year 10 and/or Year 11 and/or 12 or equivalent.

EAS type	Equity adjustments	EAS category and description
Natural Disasters	6	N01D – Natural Disaster
Excessive family responsibility	Up to 6	H03A – Care of children/other family members
	Up to 6	H03B – Required to work to support family
	Up to 3	H03C – Sole responsibility for care of self
Abuse	Up to 5	H04A – Abuse to applicant, parent/s, or sibling/s
English language difficulty	Up to 3	L01A – ESL/started school in Australia in Year 11 or 12
Personal illness / disability	Up to 5	P01A* – Disability or long-term medical condition
Socio-economic indexes for areas (SEIFA)	3	AG01 – Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)
	3	AG02 – Index of Education and Occupation (IEO)
School environment	Up to 4	S01R – Australian rural, regional or remote school
	Up to 5	S01D – Studying Year 12 subjects by distance education or Access program

## Elite athlete adjustments

ANU is an elite athlete-friendly university. We will provide additional support if you are recognised as an elite athlete by the Australian Sports Commission's AIS Personal Excellence program. You may be eligible for five elite athlete adjustments.

- > [study.anu.edu.au/apply/elite-athlete-friendly-university-eafu-entry-scheme](http://study.anu.edu.au/apply/elite-athlete-friendly-university-eafu-entry-scheme)



# JOIN THE STEM CHALLENGES

This event series is an opportunity for high school and college students to participate in fun and hands-on weekly challenges on a range of science, technology, engineering, and mathematics (STEM) topics. Registration is essential and will stay open throughout the activity period. The challenges run every year in October.

Scan the QR code to register, or go to [science.anu.edu.au/2024-stem-challenges](https://science.anu.edu.au/2024-stem-challenges)



# GO ON A 360 DEGREE VIRTUAL TOUR



Ever wondered what the science buildings and facilities at the ANU look like from the inside? Take yourself on a 360 tour and find out.

Scan the QR code to see the available tours, or go to [science.anu.edu.au/study/360-virtual-tours](https://science.anu.edu.au/study/360-virtual-tours)



- Science Precinct
- Wet Laboratory
- ANU MakerSpace
- Mulligans Flat
- Fluid Dynamics Laboratory

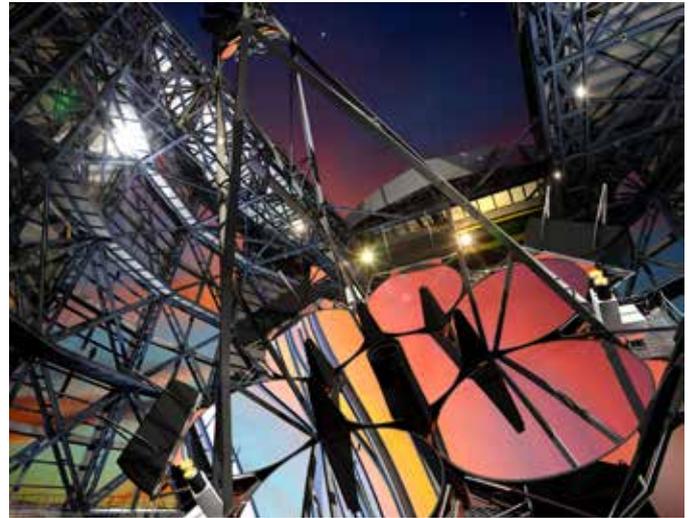
# WORLD-CLASS FACILITIES



▲ Our \$240-million science precinct on the ANU campus has state-of-the-art biological and chemical research laboratories, as well as a teaching hub.



◀ In partnership with the ACT Government and CSIRO, we are working to improve biodiversity at the “outdoor laboratories” of Mulligans Flat and Gorooyarroo Nature Reserves in the Canberra Nature Park.



▲ ANU is part of an international partnership to design and build the world’s largest optical telescope: the Giant Magellan Telescope (GMT).



◀ Our Heavy Ion Accelerator Facility is the one of the largest in the world, supporting Australia’s only experimental nuclear physics program.



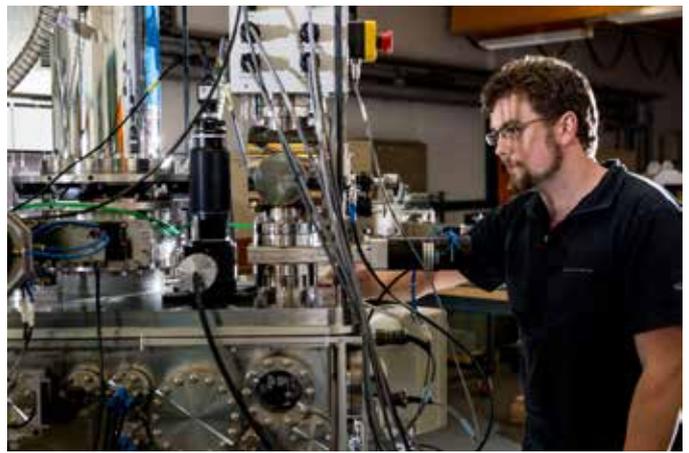
◀ ANU is home to the fastest super computer in the southern hemisphere at the \$50-million National Computational Infrastructure.

You can study ecological farming principles and holistic landscape management at our rural field station at Mulloon Creek. ▶





▲ The ANU Siding Spring Observatory in north-west New South Wales is Australia's premier optical and infrared observatory, housing the state-of-the-art SkyMapper telescope.

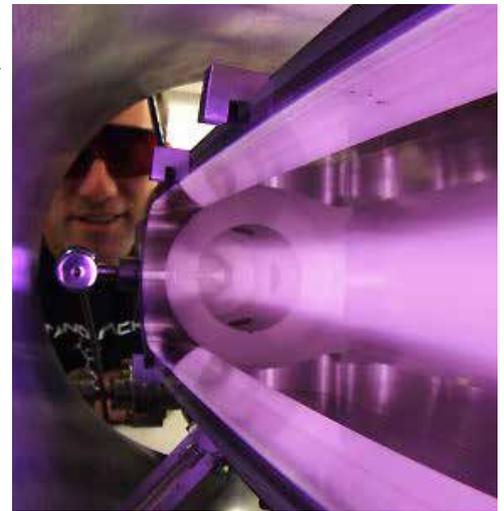


▲ The Sensitive High Resolution Ion Microprobe (SHRIMP) for analysing geological materials was designed and developed at ANU.



◀ The Australian Plant Phenomics Facility at ANU is the only place in the world that provides high-calibre public sector access to infrastructure and expertise on crop performance.

▶ The Australian Plasma Fusion Research Facility is a uniquely versatile resource for developing fusion energy.



▶ The Kioloa Coastal Campus is one of the university's research facilities and field stations, providing a range of accommodations, teaching, research as well as meeting, conference, performance and workshop facilities.



▼ The Australian Phenomics Facility at ANU specialises in mouse models of human disease and is one of Australia's foremost genomics and bioinformatics capabilities.



▲ The \$30-million Advanced Instrumentation and Technology Centre at our Mount Stromlo Observatory is a world-class facility for developing space instruments.





Australian  
National  
University

## Contact us

ANU College of Science  
The Australian National University

W [science.anu.edu.au](http://science.anu.edu.au)  
E [science@anu.edu.au](mailto:science@anu.edu.au)

### Student enquiries

T 1800 620 032  
E [future.student@anu.edu.au](mailto:future.student@anu.edu.au)

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