

# Postgraduate Student Guide

ANU College of Science



Australian  
National  
University





# WHY ANU?



## Our university

**#1** university in Australia<sup>1</sup>

**#27** university in the world<sup>1</sup>



## Our students

**#1** for graduate employability  
in Australia<sup>2</sup>

**5,756** student accommodation  
beds on campus

**5 star** rating for staff-to-  
student ratio<sup>3</sup>



## Nobel Prize winners

**6** Nobel laureates among our  
staff and alumni

1. QS World University Rankings 2022  
2. Times Higher Education 2020  
3. Good Universities Guide 2021



# CONTENTS

Postgraduate coursework programs	2
Postgraduate research	4
Our degrees	6
> Master of Biotechnology	10
> Master of Earth Sciences (Advanced)	11
> Master of Science in Earth Sciences	12
> Master of Energy Change	13
> Master of Environment	14
> Master of Mathematical Sciences (Advanced)	15
> Master of Science Communication	16
> Master of Science in Agricultural Innovation	17
> Master of Science in Astronomy & Astrophysics	18
> Master of Science in Biological Sciences	19
> Master of Science in Materials Science	20
> Master of Science in Mathematical Sciences	21
> Master of Science in Nuclear Science	22
> Master of Science in Precision Instrumentation & Measurement	23
> Master of Science in Quantitative Biology and Bioinformatics	24
> Master of Science in Quantum Technology	25
> Master of Science in Theoretical Physics	26
Internships	27
Field Trips	28

Please note that this student guide is correct as at time of printing in August 2022 and should be used as a guide only. For the most up-to-date information please visit the ANU website.



# POSTGRADUATE COURSEWORK PROGRAMS

## Postgraduate coursework programs

A major component of a postgraduate coursework degree program is attendance at lectures and tutorials; examinations; and the submission of assessments such as essays and assignments.

Some postgraduate coursework programs also include a research component.

Our postgraduate coursework programs result in the award of the following qualifications:

### **Graduate certificate:**

Approximately 24 units, or six months of full-time study.

### **Graduate diploma:**

Approximately 48 units or one year of full-time study.

### **Master degree:**

Approximately 96 units, or two years of full-time study (or less with credit).

### **Master (Advanced) degree:**

Approximately 96 units, or two years of full-time study (or less with credit). Includes a 24-48 units supervised research project. Length of the thesis will vary depending on the program.

## Am I qualified to apply?

Postgraduate coursework programs require completion of an undergraduate degree to apply for a postgraduate coursework program. In most cases it will need to be in a cognate (related) discipline.

Each program has specific application requirements. For up to date information please refer to the Programs and Courses entry or ANU website.

## When can I start?

Most degree programs have two intakes per year and can be started in either semester one (mid- to late February) or semester two (mid-July).

For up to date information please refer to the Programs and Courses entry or ANU website.

## How much does it cost?

Fees for domestic and international students can be found in each of the program descriptions in this guide. Please note the fees listed are indicative only as they are dependent on your course selection and are subject to change. For up to date information please refer to the Programs and Courses entry or ANU website.

## Are scholarships available?

Some of our research schools offer scholarships for specific programs. There are a number of ANU scholarships available to domestic and international students, as well as external scholarships managed by organisations outside of the University.

For more information, visit [anu.edu.au/study/scholarships](http://anu.edu.au/study/scholarships)

## How do I apply?

Domestic students apply for postgraduate coursework programs through the University Admissions Centre (UAC) at [uac.edu.au](http://uac.edu.au).

The closing date for semester one entry is the end of January, and the closing date for semester two entry is the end of June.

International students can apply for postgraduate coursework programs and find more information about closing dates online at [anu.edu.au/study/apply/international-applications-undergraduate-and-postgraduate](http://anu.edu.au/study/apply/international-applications-undergraduate-and-postgraduate)

## How long does it take to finish a Masters degree?

A Master degree from ANU usually takes two years of full-time study to complete, but most programs can be fast-tracked with recognition of previous study in a related discipline.

## Can I get credit for previous study?

Your prior study might count towards your Master degree, meaning you can complete the degree in less than two years.

If you have an Australian undergraduate degree (or international equivalent) in a related field, you might get up to six months' credit towards your Master degree.

If you have an Australian undergraduate degree with honours (or international equivalent) in a related field, or a graduate diploma in a related field, you may be eligible for up to 48 units (1 year) of credit, leaving you with only one year of full-time study to complete your Master degree.

Graduate certificate and graduate diploma awards are available as exit options in circumstances where the two-year Master degree cannot be completed.

For up to date information please refer to the Programs and Courses entry or ANU website.

## English Language Requirements

You must provide evidence of English language proficiency required for admission to ANU.

You may meet this requirement if your tertiary studies were entirely taught and assessed in English during the past two years.

If you are an international student and you completed your English studies more than two years ago, you will need to provide an English proficiency test certificate, such as the International English Language Testing System (IELTS) or the Test of English as a Foreign Language (TOEFL).

Test	Regular Degree Programs (including Exchange and Study Abroad)
Academic IELTS	An overall score of 6.5 with at least 6 in each component of the test
TOEFL** – paper-based test	A score of 570 with TWE* score of 4.5
TOEFL** – internet-based test	A score of 80, with a minimum of 20 in Reading and Writing and 18 in speaking and Listening
Cambridge C1 Advanced	An overall score of 176 with a minimum of 169 in all sub-skills.
PTE Academic	Overall 64, minimum score of 55 in each section

\*TWE = Test of Written English

\*\*The TOEFL institutional code for the ANU is 0506. Applicants may use this code to report their TOEFL results to the university.\*

# POSTGRADUATE RESEARCH

We offer Doctor of Philosophy (PhD) and Master of Philosophy (MPhil) postgraduate research programs across a range of disciplines in science.

Our postgraduate research students have access to cutting-edge research facilities and work alongside some of the world's most influential and innovative academics.

## Pathways to a PhD

If you are interested in a PhD but your previous studies do not include a research component, you can consider an advanced Master degree, which combines coursework and research. Upon completion, you will have the skills to continue your research career and the academic qualifications needed to apply for a PhD.

You can find more information about our advanced Master programs in the postgraduate coursework section of this guide.

## Postgraduate research areas

### Astronomy and astrophysics:

The research interests of our staff include planetary science, cosmology, instrumentation, observational and theoretical aspects of extra-solar planets, stellar atmospheres and evolution, the interstellar medium, globular clusters, galactic structure, the Magellanic clouds, normal galaxies, active galaxies, radio sources, quasars, and cosmology.

### Biomedical science and biochemistry:

We offer research projects in a range of biological systems, which involve fundamental investigations and applications of molecular, physiological, cellular, developmental and genetic processes in animals, plants, microorganisms and viruses.

### Chemistry:

Our research groups work in areas from a wide spectrum of chemistry, including computational chemistry, materials science and protein structure and function. A large number of international scientists visit the groups each year and contribute to research projects, the extensive seminar series and graduate lecture series.

### Earth, marine and planetary sciences:

Our research in Earth sciences focuses on the physical and chemical Earth processes ranging from those that led to the Earth's formation and shaped its subsequent evolution, to processes impacting on our current environment. Our research is multidisciplinary and encompasses the physical sciences, geology, and biology.

### Environment and resource management:

Our research students collaborate with world-renowned academic leaders in a wide range of topics spanning environment and society, including conservation biology, landscape ecology, interdisciplinary environmental studies, sustainability science, global change, environmental policy and economics, forest science and geography.

### Evolution, ecology and genetics:

Research in evolution, ecology and genetics is a broad-based program that aims to provide students with a diversity of opportunities and training in biological research, and encourages graduates to take advantage of the rich and diverse community of biologists engaged in teaching, research, environmental management and policy formulation in Canberra.

### Mathematical and computational sciences:

Broad research areas include advanced computation and modelling, algebra and topology; analysis and geometry; applied and nonlinear analysis; astronomy and astrophysics; mathematical physics; statistical science; and stochastic analysis. Students have the choice of studying mathematics and statistics in their own right and/or applying them in other disciplines.

### Physics:

The underlying impetus of our research in physics is a belief in the fundamental importance of physics to all of science. Research areas include applied mathematics, materials engineering, quantum science, optics and theoretical physics. Students have access to some of Australia's most important installations, such as the only Heavy Ion Accelerator and centre for nuclear research in the country.

### **Plant sciences:**

Research in plant sciences serves as a focal point for graduate students interested in the broad range of research in plant biology that exists in the scientific community in Canberra. Students have the opportunity to work on research incorporating photosynthesis and plant energy biology; plant environmental biology and functional ecology; plant genetics and gene regulation; and plant-microbe interactions.

### **Science communication:**

Research in science communication is for graduates with an interest in how science is communicated to diverse non-scientific audiences. Students may examine a scientific issue from a public communication perspective, investigate how a particular medium works to engage people with science, or explore scientists' experiences with communication.

## **How to apply for a PhD or an MPhil**

### **STEP 1: Expression of interest**

Prospective research students first need to identify a research project and find an academic supervisor.

If you are not sure which area of research or supervisor matches your interest please complete an expression of interest online at [science.anu.edu.au/hdr-expression-interest](https://science.anu.edu.au/hdr-expression-interest)

### **STEP 2: Academic supervisor**

Email your preferred academic supervisor directly to enquire about projects and supervision. You may also submit a short research proposal.

Once an academic supervisor has been confirmed to support your application you may proceed to step three.

### **STEP 3: Scholarships**

A number of scholarships are available and are awarded on a merit basis. You can also talk to your academic supervisor about other sources of funding you might access to assist with living expenses and tuition fees.

Please note, international research scholarships are only awarded to the most outstanding students and are extremely competitive.

Scholarship applications can be made when completing the program application process, step four.

### **STEP 4: Application**

Applicants should apply online at [anu.edu.au/study/apply/anu-postgraduate-research-domestic-and-international-applications](https://anu.edu.au/study/apply/anu-postgraduate-research-domestic-and-international-applications)

# OUR DEGREES

DEGREE NAME	DESCRIPTION
<b>Master of Biotechnology</b>	Place yourself at the forefront of innovation, engineering organisms to address issues of food security, disease and climate change. Study alongside our leading researchers who work on issues of global importance in areas of biochemistry and molecular biology in the biomedical, animal and plant sciences.
<b>Master of Biotechnology (Advanced)</b>	The Advanced program incorporates a year-long research project supervised by an academic.
<b>Master of Earth Sciences (Advanced)</b>	In this program students will delve into the complex systems and processes that shape our planet, at Australia's leading academic research institution for Earth sciences. Study courses from different Earth science disciplines and undertake training on how to gather data and interpret results, before undertaking a research project supervised by an academic.
<b>Master of Energy Change</b>	Climate change is one of the greatest challenges of the 21st century, and can only be solved with a worldwide transition to carbon-free forms of energy. In this interdisciplinary degree, you'll tailor a suite of courses suited to your individual interests, skills and aspirations, developing your expertise in the relevant policy, legal, technological, environmental and regulatory aspects of energy change.
<b>Master of Energy Change (Advanced)</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Environment</b>	Equip yourself with the skills to tackle the big environmental problems facing contemporary and future society. You could choose to specialise in biodiversity conservation, climate science and policy, disaster studies, environmental policy, environmental studies and human ecology, geography, natural resource management, sustainability science or water science and management.
<b>Master of Environment (Advanced)</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Mathematical Sciences (Advanced)</b>	Study a variety of courses tailored to your interests and needs, ranging from pure mathematics to mathematical modelling, computational mathematics and applications of mathematics.
<b>Master of Science Communication</b>	In this contemporary degree, you'll join Australia's founding and leading science communication institution, and be taught by some of world's leading science communicators. Combining theoretical and practical aspects of science communication, you'll delve into topics including science in the media, science and public policy, ethics of science and cross-cultural science communication. You can choose to complete an internship as part of your degree and graduate with real-world science communication skills, professional networks, and pathways to employment.
<b>Master of Science in Agricultural Innovation</b>	Globally, agriculture will need to feed over nine billion people by 2050. With a changing climate and increasing competition for land, water and energy resources, the agricultural sector will need to find innovative ways to do more with less.
<b>Master of Science (Advanced) in Agricultural Innovation</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Science in Astronomy &amp; Astrophysics</b>	This program covers a broad range of areas including astrophysical techniques and computing, planetary science, stellar astrophysics, galaxies and cosmology. Some of these courses will provide opportunities to contribute to research by analysing telescope data, developing theoretical models, or testing of new astronomical instrumentation.
<b>Master of Science (Advanced) in Astronomy &amp; Astrophysics</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Science in Biological Sciences</b>	This program allows you to specialise in a particular area of biology such as biomedical sciences, ecology and evolution, genetics, and plant sciences. Alternatively, you can utilise the program to provide a broad overview of biological sciences today.
<b>Master of Science (Advanced) in Biological Sciences</b>	This program offers a research component which provides the student an opportunity to conduct hands-on research in a laboratory of a research scientist/supervisor.



DURATION (FULL TIME)	SEMESTER INTAKE	ENTRY REQUIREMENTS	UAC CODE	CRICOS CODE
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least 8 courses in a cognate discipline, which must also have a minimum GPA of 5.0/7.0. The program also has a chemistry/biochemistry pre-requisite which requires a minimum of 2 courses of undergraduate chemistry/biochemistry	830701	082279A
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least 8 courses in a cognate discipline, which must also have a minimum GPA of 5.5/7.0. The program also has a chemistry/biochemistry pre-requisite which requires a minimum of 2 courses of undergraduate chemistry/biochemistry	830702	082280G
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in a cognate discipline.	830782	082288M
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in cognate disciplines with a GPA of 5.0/7.0 in those courses.	830776	082291E
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in cognate disciplines with a GPA of 5.5/7.0 in those courses.	830777	082292D
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0	830715	082293C
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0.	830716	082294B
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in cognate disciplines with a GPA of 5.5/7.0 in those courses.	830788	082337G
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in cognate disciplines or have at least 10 years work experience in a related field.	830749	082350K
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0. with at least 8 courses in a cognate discipline with a GPA of at least 5.0/7.0 in these courses.		0101483
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0. with at least 8 courses in a cognate discipline with a GPA of at least 5.5/7.0 in these courses.		0101484
2 years	1 & 2	A Bachelor degree or international equivalent with a GPA of 5.0/7.0 with at least 8 courses in a cognate discipline with a GPA of at least 5.0/7.0 in these courses with a minimum of 2 courses of undergraduate second year Physics; and a minimum of 1 course of undergraduate second year Mathematics.	830760	0101476
2 years	1 & 2	A Bachelor degree or international equivalent with a GPA of 5.5/7.0 with at least 8 courses in a cognate discipline with a GPA of at least 5.5/7.0 in these courses with a minimum of 2 courses of undergraduate second year Physics; and a minimum of 1 course of undergraduate second year Mathematics. Completion of ASTR3005 Astrophysics Research Topic or equivalent.	830761	0101477
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in a cognate discipline with a GPA of at least 5.0/7.0 in these courses.	830706	096439G
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in a cognate discipline with a GPA of at least 5.5/7.0 in these courses.	830707	096440D

# OUR DEGREES

DEGREE NAME	DESCRIPTION
<b>Master of Science in Earth Sciences</b>	This program delves into the complex systems and processes that shape our planet at a time when understanding it has never been more important.
<b>Master of Science in Materials Science</b>	This program includes a mix of coursework and research projects, equipping you with the required skills and knowledge of the scientific, technical, and societal aspects of materials to be highly competitive in the rapidly expanding materials science industry of the present day and of the future.
<b>Master of Science (Advanced) in Materials Science</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Science in Mathematical Sciences</b>	In this program you can study a variety of courses tailored to your own interests and needs, ranging from pure mathematics to mathematical modelling, computational mathematics and applications of mathematics to many research areas (such as biology, astronomy, physics and environmental sciences), to related disciplines such as statistics, computer science, and econometrics.
<b>Master of Science in Nuclear Science</b>	Students will study the fundamentals and applications of nuclear science, including materials analysis, dating techniques, nuclear medicine, and nuclear energy. The degree is a mix of coursework and projects, comprising individual and group-based research. You will develop the scientific background you need for informed debate on nuclear issues, without advocating a particular position.
<b>Master of Science (Advanced) in Nuclear Science</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Science in Precision Instrumentation &amp; Measurement</b>	In this program students have the opportunity to learn the most advanced techniques for studying the heavens, the Earth, and everything in-between. The interdisciplinary expertise students acquire will impact on diverse areas of fundamental scientific research as well as industrial applications. The degree is a mix of coursework and projects, comprising individual and group-based research.
<b>Master of Science (Advanced) in Precision Instrumentation &amp; Measurement</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Science in Quantitative Biology and Bioinformatics</b>	This program provides students with experience in the use of methods and tools to organise and analyse biological data, statistically, mathematically and computationally.
<b>Master of Science (Advanced) in Quantitative Biology and Bioinformatics</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Science in Quantum Technology</b>	This program equips you with the required skills and knowledge of the scientific, technical, business and societal aspects of quantum technology to be highly competitive in the emerging quantum industries of the present day and of the future.
<b>Master of Science (Advanced) in Quantum Technology</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.
<b>Master of Science in Theoretical Physics</b>	This program brings students to the cutting edge of research in an interactive training environment, being taught by some of the world's leading theoretical physicists. You will discover the breadth of theoretical physics, including how non-linear dynamics can be applied to complex problems.
<b>Master of Science (Advanced) in Theoretical Physics</b>	The Advanced program incorporates up to a year-long research project supervised by an academic.

For detailed admission requirements check the Programs and Courses website: [programsandcourses.anu.edu.au](https://programsandcourses.anu.edu.au)



DURATION (FULL TIME)	SEMESTER INTAKE	ENTRY REQUIREMENTS	UAC CODE	CRICOS CODE
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.0/7.0.	830781	0101480
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.0/7.0. Applicants are required to have the equivalent of an ANU minor in Chemistry and a minimum of 2 courses of undergraduate Maths and a minimum of 2 courses of undergraduate Physics.	830792	102930J
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.5/7.0. Applicants are required to have the equivalent of an ANU minor in Chemistry and a minimum of 2 courses of undergraduate Maths and a minimum of 2 courses of undergraduate Physics.		102931H
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.0/7.0.	830787	102929B
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.0/7.0.	830750	099254D
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.5/7.0.	830740	099251G
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in the fields of Physics or Engineering with a minimum GPA of 5.0/7.0. Mathematics at least to the level of MATH2305.	830747	099248B
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in the fields of Physics or Engineering with a minimum GPA of 5.5/7.0. Mathematics at least to the level of MATH2305.	830748	099249A
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.0/7.0.	830737	096439G
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.5/7.0.	830738	096440D
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.0/7.0.	830741	099252F
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.5/7.0.	830752	099253E
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.0/7.0.	830753	0101481
2 years	1 & 2	A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in a cognate discipline with a minimum GPA of 5.5/7.0.	830754	0101482

# MASTER OF BIOTECHNOLOGY

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830701 / 830702 (Advanced)

**CRICOS code:** 082279A / 082280G (Advanced)

**Cognate disciplines:** Biochemistry, Molecular Biology and Gene Technology

🏆 #1 in Australia for Natural Sciences\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0, with at least 8 courses in a cognate discipline, which must also have a minimum GPA of 5.0/7.0. The program also has a chemistry/biochemistry pre-requisite which requires a minimum of 2 courses of undergraduate chemistry/biochemistry.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

The Master of Biotechnology is a coursework program that provides a pathway for science graduates with background knowledge in biochemistry, molecular biology and chemistry to acquire new knowledge, or extend and update their theoretical and practical understanding of modern biotechnology.

Throughout the program, students have many opportunities to interface with scientists who are advancing research in areas of biochemistry and molecular biology in the biomedical, animal and plant sciences.

## Career opportunities

A Master of Biotechnology degree provides students with opportunities to carry out research in basic, medical or agricultural sciences in university, industry or government research institutions. Opportunities exist in scientific sales, pharmaceutical and pathology companies, or in government and public service positions. A Master of Biotechnology (Advanced) can lead to a PhD.



## GRADUATE PROFILE

### Pallavi Venkatesh

#### Master of Biotechnology

For her master's degree in biotechnology, Pallavi Venkatesh studied one of the most important tools in modern medicine, the Vaccinia virus, which was used as a vaccine to eradicate smallpox.

"I found out that different strains of the virus preference different pathogen-sensing molecules found within immune cells, which is really exciting."

## MASTER OF BIOTECHNOLOGY (ADVANCED)

### Admission requirements

A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least 8 courses in a cognate discipline, which must also have a minimum GPA of 5.5/7.0. The program also has a chemistry/biochemistry pre-requisite which requires a minimum of 2 courses of undergraduate chemistry/biochemistry.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

The Advanced program incorporates a research project supervised by an academic, and is a gateway to further research, such as a PhD.

A scholarship is offered to international students pursuing a PhD who receive the highest mark in the Advanced program.

[science.anu.edu.au/study/masters/master-biotechnology](https://science.anu.edu.au/study/masters/master-biotechnology)



# MASTER OF EARTH SCIENCES (ADVANCED)

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830782

**CRICOS code:** 082288M

**Cognate disciplines:** Earth & Marine Sciences, Physics, Chemistry, Biology, Computer Sciences, Astronomy & Astrophysics, Physical Geography, Mathematics, Engineering

🏆 #1 in Australia for Earth and Marine Sciences, Geology, Geophysics and Natural Sciences\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least eight courses in a cognate discipline with a GPA of at least 5.5/7.0 in these courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

Earth science deals with complex systems and processes that shape our planet. Pressing issues such as the safe supply of water, resources and energy, climate change, sea level rise as well as natural hazards are all intimately related to Earth sciences. Courses from different Earth science disciplines and training on how to gather data and interpret them are offered, as well as expert supervision for your extensive research project.

A number of scholarships are on offer to the best international and domestic students.



## GRADUATE PROFILE

### Tharika Liyanage

#### Master of Earth Sciences (Advanced)

Curiosity about the past is exactly what attracted Tharika to Earth Sciences, she says, first in her Bachelor of Science and then her Master of Earth Sciences (Advanced), both at ANU.

“What really speaks to me about Earth Sciences is the power of being able to read our history from the rocks. When I first started studying it, I thought it was just fossils, and that was as far back as they could take you, but when I was introduced to fossilised molecules, I realised we can take the record even further back, and that’s so cool.”

## Career opportunities

A Master of Earth Sciences (Advanced) degree gives you the opportunity to gain a wide range of knowledge and skills that are relevant for employment in industry, government agencies, education, as well as for further university studies. It is an excellent qualification for pursuing a career at geosciences agencies or within mineral & hydrocarbon exploration, natural resource management, environmental monitoring, data sciences and the energy sector. The program is also an ideal pathway to a PhD in Australia or at leading institutes around the world.

# MASTER OF SCIENCE IN EARTH SCIENCES

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830781

**CRICOS code:** 0101480

**Cognate disciplines:** Earth & Marine Sciences, Physics, Chemistry, Biology, Computer Sciences, Astronomy & Astrophysics, Physical Geography, Mathematics, Engineering

🏆 #1 in Australia for Earth and Marine Sciences, Geology, Geophysics and Natural Sciences\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in a cognate discipline with a GPA of 5.0/7.0 in those courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

As a Master of Science in Earth Sciences student, you'll delve into the complex systems and processes that shape our planet at a time when understanding it has never been more important. You'll be studying at Australia's leading academic research institution for Earth sciences, ranked #1 in Australia (QS, 2022). We have a reputation for international leadership and innovation, focused on developing new methods, whether experimental, analytical or computational. You'll study courses ranging from computational geosciences to analytical techniques, biogeochemistry, experimental petrology, geobiology, geochemistry, geochronology, geophysics, ocean and climate change and planetary sciences.

## Career opportunities:

A Master of Science in Earth Sciences gives you the opportunity to gain a wide range of knowledge and skills that are relevant for employment in industry, government agencies and education. It is an excellent qualification for pursuing a career in tectonics, geochronology, mineral exploration and hydrocarbon exploration.



## FACILITIES

### Sensitive High Resolution Ion Microprobe (SHRIMP)

The Sensitive High Resolution Ion Microprobe (SHRIMP) is a mass spectrometer used for in-situ analysis of geological materials. Developed at ANU, SHRIMP has revolutionised geochronology and is an important tool for understanding early Earth history. There are now 15 SHRIMP instruments installed across the world, including Australia's only SHRIMP, at ANU.

[science.anu.edu.au/study/masters/master-science-earth-sciences](https://science.anu.edu.au/study/masters/master-science-earth-sciences)



# MASTER OF ENERGY CHANGE

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2


**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830776 / 830777 (Advanced)

**CRICOS code:** 082291E / 082292D (Advanced)

**Cognate disciplines:** Biology, Chemistry, Economics, Engineering, Environmental Studies, Law, Mathematics, Physics, Political Science, Sociology

 #1 in Australia for Natural Sciences\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in a cognate discipline with a GPA of 5.0/7.0 in those courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

The Master of Energy Change is an interdisciplinary coursework program that allows you to develop a program of advanced learning suited to your individual interests, skills and aspirations in the area of energy change. A major key to addressing climate change is the need for a world-wide change to carbon-free forms of energy production.

## Career opportunities

The need for energy change is well-established yet there are relatively few people with an effective overview or the multi-disciplinary skills needed to effectively contribute to this complex issue. Depending on the area of study and specialisation, our graduates find work in government, policy, scientific research, development and aid organisations, multi-national companies, and many other exciting fields. The Advanced program is also a pathway to more advanced study.



## GRADUATE PROFILE

### Rahul Ravindranathan and Aniruddha Deshpande

#### Master of Energy Change

Good friends Rahul Ravindranathan and Aniruddha Deshpande didn't know one another until they found themselves on the same journey from India to Canberra to study a Master of Energy Change. Now they've graduated from ANU, but the journey continues for both of them – with jobs in the local renewable energy sector.

## MASTER OF ENERGY CHANGE (ADVANCED)

### Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0 and at least eight courses in cognate disciplines with a GPA of 5.5/7.0 in those courses.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

The Master of Energy Change (Advanced) is a multi-disciplinary coursework and research degree which will provide you with both a strong basis in the fundamental areas related to energy change, as well as allowing you to undertake advanced courses and research in areas suited to your individual interests.

# MASTER OF ENVIRONMENT

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830715 / 830716 (Advanced)

**CRICOS code:** 082293C / 082294B (Advanced)

**Cognate disciplines:** Anthropology, Asia Pacific Studies, Biodiversity, Biology, Climate Change, Conservation Biology, Development Studies, Earth Science, Ecology, Environmental Policy, Environmental Science, Environmental Studies, Forestry, Geography, Human Ecology, Indigenous Australian Studies, Natural Resource Management, Policy Studies, Population Studies, Public Health, Resource Management and Environmental Science, Science Communication, Sociology, Soil Science, Sustainability Science, Sustainable Development, Urban Planning, Water Science

 #1 in Australia for Natural Sciences\*

\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year) of credit.

## Program description

The Master of Environment degrees allow you to develop a program of advanced learning suited to your individual interests and skills in environment and sustainability.

A broad-ranging suite of courses from across the University provides exposure to current perspectives on environmental issues and approaches. Areas of interest include environmental science and management, social and ecological linkages, environmental economics and governance, environmental policy, and integrative approaches to research and analysis.

You will also develop depth of knowledge in a selected disciplinary area. Available specialisation options include: biodiversity conservation, climate science and policy, environmental policy, environmental studies and human ecology, geography, natural resource management, sustainability science, and water science and management.



## GRADUATE PROFILE

### Mae Noble

#### Master of Environment (Advanced)

"I was working in the marine ecology field, and I realised that the social aspect of conservation was often lacking. I believe there is a lot of potential for applied conservation to include people's input and involvement at multiple levels"

## Career opportunities

You can choose from a range of careers as diverse as the environment itself. Many of our graduates are employed in policy-making within local, state and federal governments, water resource management, environmental management, urban planning and sustainability, climate change adaptation consulting, and applied research science.

## MASTER OF ENVIRONMENT (ADVANCED)

### Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

In the Advanced program you will develop research expertise through completing a substantial research project supervised by an academic, which constitutes appropriate research training for a PhD.

[science.anu.edu.au/study/masters/master-environment](https://science.anu.edu.au/study/masters/master-environment)

# MASTER OF MATHEMATICAL SCIENCES (ADVANCED)

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830788

**CRICOS code:** 082337G

**Cognate disciplines:** Mathematics, Statistics, Mathematical Economics, Mathematical Finance, Actuarial Studies, Computer Science, Bioinformatics

 #1 in Australia for Natural Sciences\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0 and at least eight courses in a cognate discipline with a GPA of 5.5/7.0 in those courses.

## Eligibility for credit

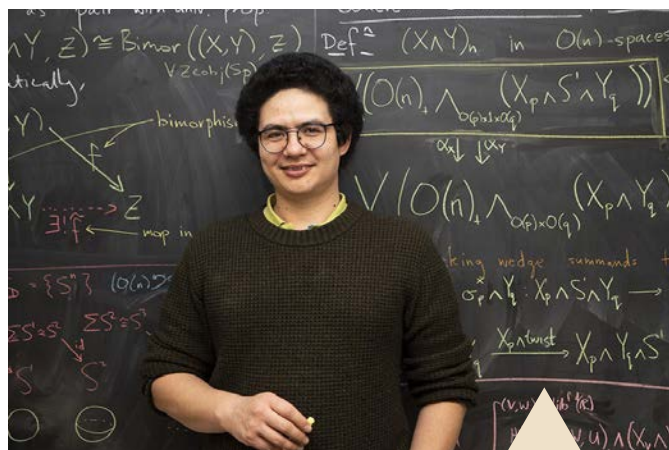
Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

This Advanced program enables students to upgrade their expertise in the mathematical sciences, either as a route to further study of mathematical sciences, or to upgrade their quantitative skills in areas that are rapidly becoming more reliant on advanced techniques from the mathematical sciences, such as the biological and computational sciences.

Students can take a variety of courses ranging from pure mathematics to mathematical modelling, computational mathematics and applications of mathematics, as well as courses in related disciplines such as statistics, computer science, financial mathematics and econometrics. The program can be tailored to the interests and needs of each student as much as possible. Past students have completed research projects in various branches of pure mathematics, as well as in applications including economics, epidemiology, financial mathematics and computational astrophysics.

This program includes a substantial research project supervised by an academic, which constitutes appropriate research training for a PhD.



## GRADUATE PROFILE

### Ivo Vekemans

#### Master of Mathematical Sciences (Advanced)

Ivo is a self-described blackboard evangelist.

“Let’s start with the senses: a blackboard looks better, it sounds better, it feels better, it smells better and it probably tastes better.

“When you’re communicating mathematics, it’s not just about doing an info-dump, it’s about the process. If you lecture with a whiteboard marker, you write too quickly. With chalk, you write more slowly and more neatly.”

## Career opportunities

Examples of roles of our graduates include: Associate, Quantitative Applications Division at Macquarie Group; Lecturer, Sanata Dharma University (Indonesia); and Visiting Assistant Professor of Managerial Economics and Decision Sciences, Kellogg School of Management (USA).

Areas such as biological sciences and computational science are becoming increasingly reliant on advanced techniques from the mathematical sciences. The Master of Mathematical Science will equip you with quantitative skills in this areas, as well as act as a pathway to a PhD.



# MASTER OF SCIENCE COMMUNICATION

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830749

**CRICOS code:** 082350K

**Cognate disciplines:** Mathematical Sciences, Physics and Astronomy, Chemical Sciences, Earth Sciences, Biological Sciences, Environmental Studies, Other Natural and Physical Sciences, Information Technology, Engineering and Related Technologies, Health, Education, Communication and Media

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in cognate disciplines.

Or have at least 10 years work experience in a related field.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

Taught by some of Australia's leading science communicators, the program combines theoretical and practical aspects of science communication, including courses on science in the media; science communication on the web, ethics, issues and consequences of science; science and public policy; and cross-cultural science communication.

Research projects have looked at a range of key issues in the relationship between science and the rest of society, such as attitudes to controversial science, use of rhetoric in science communication, and cutting edge use of new technology to communicate science.

The program is ideal for people interested in becoming professional science communication officers and managers, or in gaining skills in communicating their own science. The course allows students to choose from a range of one-year intensive fieldwork placements at Australia's leading science engagement organisations. Students explore the fundamental theory that underpins science communication in such settings, then apply it to deliver, evaluate and improve existing programs, develop novel programs and work on other suitable priorities of the fieldwork host – including working alongside and learning from their staff.

[science.anu.edu.au/study/masters/master-science-communication](https://science.anu.edu.au/study/masters/master-science-communication)



## GRADUATE PROFILE

### Vanessa Hill

#### Master of Science Communication

Vanessa created a YouTube channel called BrainCraft with about science education series explains how psychology, neuroscience and self-development that now has 36 million views.

“Studying the Master of Science Communication gave me the experience and confidence to think of myself as a professional communicator and make it a reality. I learned how to manage my time, how to investigate topics, how to be analytical and construct an argument, and improved my editing skills.”

## Career opportunities

Graduates have found careers as communications officers for scientific organisations such as CSIRO, science-oriented government departments, university departments and businesses. Examples of roles of our graduates include: Senior Medical Writer, Health Interactions; Physics Science Communicator, University of Sydney; Senior Policy Officer, Department of Industry, Innovation and Science; Freelance Journalist; and Radio Host, ABC Canberra.

# MASTER OF SCIENCE IN AGRICULTURAL INNOVATION

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830726 / 830727 (Advanced)

**CRICOS code:** 0101483 / 0101484 (Advanced)

**Cognate disciplines:** Agriculture, Biology, Environmental Science, Natural Resource Management, Engineering (general), Applied Computer Science, Commerce and Business

## Admission requirements

A Bachelor degree or international equivalent with a minimum GPA of 5.0/7.0. with at least 8 courses in a cognate discipline with a GPA of at least 5.0/7.0 in these courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

Globally, agriculture will need to feed over nine billion people by 2050. With climate change and increasing competition for land, water and energy resources, the agricultural sector will need to find innovative ways to do more with less. To achieve this, an interdisciplinary approach to problem solving will be required.

You will learn from world-leading experts from across ANU, and its industry partners, through initiatives including the Centre for Entrepreneurial Agri-Technology (CEAT), a joint ANU-CSIRO initiative. In partnership with government and industry, CEAT brings together research and technology to address industry challenges, cutting across traditional discipline boundaries.

## Career opportunities

An aging community within the agricultural research and industries is considered a limitation to advancing the agri system. Graduates can build careers in state and federal government, as researchers in industry bodies, corporations and research institutions, as innovation technologist across the agricultural sector and in supporting non-government organisations globally.



## FACILITIES

### Centre for Entrepreneurial Agri-Technology

CEAT was established in July 2018 as a joint initiative between the ANU and CSIRO, with support and funding from the ACT Government. Since then, the hub has grown to house five different agri-tech start-ups and operationalised a number of programs. These enable us to use the world-leading research expertise and infrastructure in the ANU-CSIRO innovation precinct to target real agricultural challenges independent of traditional disciplinary boundaries.

## MASTER OF SCIENCE (ADVANCED) IN AGRICULTURAL INNOVATION

### Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0. with at least 8 courses in a cognate discipline with a GPA of at least 5.5/7.0 in these courses.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

The Master of Science (Advanced) in Agricultural Innovation program provides you with the opportunity to extend your practical and coursework experience with the development and implementation of a research project supervised by an academic. This is particularly relevant to those who wish to benefit from the research strengths of ANU and pursue a career in research.

# MASTER OF SCIENCE IN ASTRONOMY & ASTROPHYSICS

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2


**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830760 / 830761 (Advanced)

**CRICOS code:** 0101476 / 0101477 (Advanced)

**Cognate disciplines:** Astronomy & Astrophysics, Computer Science, Earth & Marine Sciences, Physics, Mathematics

 #1 in Australia for Physics & Astronomy\*

\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 with at least 8 courses in a cognate discipline with a GPA of at least 5.0/7.0 in these courses with a minimum of 2 courses of undergraduate second year Physics; and a minimum of 1 course of undergraduate second year Mathematics. Completion of ASTR3005 Astrophysics Research Topic or equivalent.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

The Master of Science in Astronomy & Astrophysics is a full-time two year program based upon 100% coursework. The coursework may be tailored to a student's needs, and can include astrophysical techniques, astrophysical computing, planetary science, stellar astrophysics, galaxies, cosmology, and courses from cognate disciplines.

Many courses contain research or hands-on components that develop skills and knowledge in the latest advances in astronomy and astrophysics. They also offer training in areas highly relevant outside of academia, for example, project management, computer programming, and problem solving skills. Some of the courses may include the acquisition and analysis of telescope data, the development of theoretical models, or the development and testing of new astronomical instrumentation.



## GRADUATE PROFILE

### Donghee Nam

#### Master of Astronomy and Astrophysics (Advanced)

"We know very little about star formation. Why are stars made much more slowly than we expected? What is the ratio between the numbers of large and small stars in a galaxy? How differently are the first stars in the Universe forged compared to the stars of today? These are some of the many questions about stars that astrophysicists are trying to solve—including me."

## MASTER OF SCIENCE (ADVANCED) IN ASTRONOMY & ASTROPHYSICS

### Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0 with at least 8 courses in a cognate discipline with a GPA of at least 5.5/7.0 in these courses with a minimum of 2 courses of undergraduate second year Physics; and a minimum of 1 course of undergraduate second year Mathematics. Completion of ASTR3005 Astrophysics Research Topic or equivalent.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

The Advanced program provides you with the opportunity to extend your practical and coursework experience with the development and implementation of a research project supervised by an academic. The research component commences in the 2nd semester of study. This is particularly relevant to those who wish to benefit from the research strengths of ANU and pursue a career in research.



# MASTER OF SCIENCE IN BIOLOGICAL SCIENCES

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830706 / 830707 (Advanced)

**CRICOS code:** 096439G / 096440D (Advanced)

**Cognate disciplines:** Biology, Biomedical Sciences, Molecular Biology, Genetics, Evolution, Ecology, and Plant Sciences

 #1 in Australia for Natural Sciences\*

\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 with at least 8 courses in a cognate discipline with a GPA of at least 5.0/7.0 in these courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

The Master of Science in Biological Sciences is a versatile program that allows you to explore different fields in biology. You can also explore related topics such as biological anthropology, ethics, health and disease, innovation and public policy, environmental change, and contemporary perspectives in environmental science.

Through this program you will also develop a critical understanding of the role of science in society, a vital skill that will enable you to identify, communicate and respond to societal needs and global challenges.

## Career opportunities

A postgraduate degree in biological science will provide you with a solid background to pursue career goals in a range of fields including plant and animal laboratory science, field ecology, industry, agriculture, public and environmental policy.

Our graduates find interesting careers in a range of areas including agricultural biotechnology and plant breeding, clinical or medical research, pharmaceutical companies, biosecurity, environmental policy and biological education.



## GRADUATE PROFILE

### Minette Salmon

#### Master of Biological Sciences (Advanced)

"I've been trying to genetically engineer red blood cells to express a mutation that will stop malaria parasites getting into red blood cells, and breeding," she explains. "If you can stop the parasite getting inside the red blood cell, that's a potential cure for the disease."

## MASTER OF SCIENCE (ADVANCED) IN BIOLOGICAL SCIENCES

### Admission requirements

Applicants must present a Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least 8 courses in a cognate discipline with a GPA of at least 5.5/7.0 in these courses.

### Eligibility for credit

Applicants with a Bachelor degree, Honours, Graduate Diploma or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit.

### Program description

The Advanced program incorporates a research project supervised by an academic, and is a gateway to further research, such as a PhD.

A scholarship is offered to international students who receive the highest mark in the advanced program and then pursue a PhD at ANU.

# MASTER OF SCIENCE IN MATERIAL SCIENCES

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:**

**CRICOS code:** 102930J / 102931H (Advanced)

**Cognate disciplines:** Chemistry, Physics, Chemical Engineering and Materials Engineering




## FACILITIES

### Battery Materials and Energy Storage Laboratory (Battery Lab)

Hosted within the ANU Research School of Chemistry, the Battery Lab enables research into new battery and storage technologies.

This national facility supports the characterisation, development and performance testing of battery materials, electrolytes and devices.

 #1 in Australia for Physics and Astronomy\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in a cognate discipline with a GPA of 5.0/7.0 in those courses.

Applicants are required to have the equivalent of an ANU minor in Chemistry and a minimum of 2 courses of undergraduate Maths and a minimum of 2 courses of undergraduate Physics.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

This program provides a broad understanding of the fundamentals and specialist knowledge to face the key challenges in the development of new materials including nanomaterials. You can apply this knowledge to address current global challenges, such as producing materials for renewable energies, battery storage, energy efficiency, tissue engineering, and environmentally conscious and biocompatible materials such as biodegradable plastics.

## Career opportunities

Drawing on world leading expertise from materials scientists across our chemistry, physics and engineering research schools, this program will provide you with the techniques and skills that are in high demand. It will prepare you for a bright future in industry, government or education across areas including green energy technologies, polymer technologies, biomedical engineering, materials engineering, and chemical engineering.

## MASTER OF SCIENCE (ADVANCED) IN MATERIAL SCIENCES

### Admission requirements

Applicants must present a Bachelor degree or international equivalent with a minimum GPA of 5.5/7.0, with at least 8 courses in a cognate discipline with a GPA of at least 5.5/7.0 in these courses.

Applicants are required to have the equivalent of an ANU minor in Chemistry and a minimum of 2 courses of undergraduate Maths and a minimum of 2 courses of undergraduate Physics.

### Eligibility for credit

Applicants with a Bachelor degree, Honours, Graduate Diploma or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit.

### Program description

The Advanced program incorporates a research project supervised by an academic, and is a gateway to further research, such as a PhD.

[science.anu.edu.au/study/masters/master-science-materials-science-advanced-option-available](https://science.anu.edu.au/study/masters/master-science-materials-science-advanced-option-available)

# MASTER OF SCIENCE IN MATHEMATICAL SCIENCES

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830787

**CRICOS code:** 102929B

**Cognate disciplines:** Mathematics, Statistics, Mathematical Economics, Mathematical Finance, Actuarial Studies, Computer Science, Bioinformatics

 #1 in Australia for Natural Sciences\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in a cognate discipline with a GPA of 5.0/7.0 in those courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

This coursework program enables students to study a variety of courses tailored to their own interests and needs, ranging from pure mathematics to mathematical modelling, computational mathematics and applications of mathematics to many research areas (such as biology, astronomy, physics and environmental sciences), to related disciplines such as statistics, computer science, and econometrics.

## Career opportunities

Examples of roles of our graduates include: Associate, Quantitative Applications Division at Macquarie Group; Lecturer, Sanata Dharma University (Indonesia); and Visiting Assistant Professor of Managerial Economics and Decision Sciences, Kellogg School of Management (USA).

Areas such as biological sciences and computational science are also becoming increasingly reliant on advanced techniques from the mathematical sciences. The Master of Mathematical Science will equip you with quantitative skills applicable to these areas and more.

<https://science.anu.edu.au/study/masters/master-science-mathematical-sciences>



## ACADEMIC PROFILE

### Professor Amnon Neeman

#### Pure Mathematician

Professor Neeman solved two open problems which have, for the past 20 years, thwarted the efforts of the best algebraists in the world.

"I find it calming. When I am in one of these phases, when I'm really completely absorbed by a problem, it takes my mind off other things."



# MASTER OF SCIENCE IN NUCLEAR SCIENCE

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

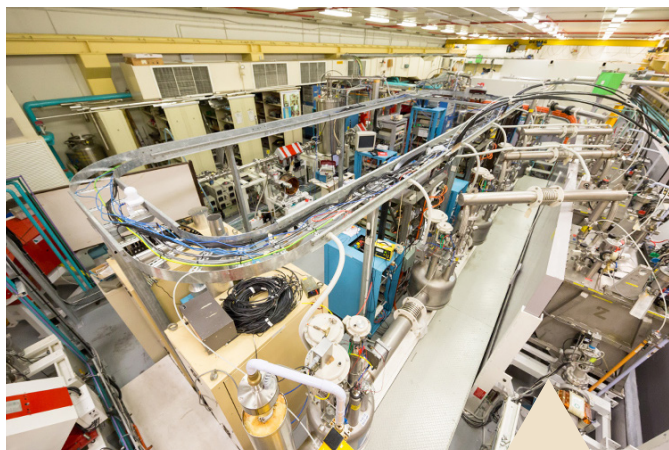
**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830750 / 830740 (Advanced)

**CRICOS code:** 099254D / 099251G (Advanced)

**Cognate disciplines:** Physics, Engineering



## FACILITIES

### Heavy Ion Accelerator Facility (HIAF)

The Heavy Ion Accelerator Facility (HIAF) comprises the 14UD pelletron accelerator and a superconducting 'booster' linear accelerator. The HIAF supports Australia's only experimental nuclear physics program, a major accelerator mass spectrometry program and facilities for ion-beam modification and analysis of materials.

## MASTER OF SCIENCE (ADVANCED) IN NUCLEAR SCIENCE

### Admission requirements


A Bachelor degree or international equivalent with a GPA of 5.5/7.0 and at least eight courses in the field of Physics or Engineering with a GPA of 5.5/7.0 in those courses.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

The Advanced program provides you with the opportunity to extend your practical, coursework experience in nuclear science with the development and implementation of a research project supervised by an academic. You will be required to develop expertise in a nominated area through independent research and completion of a thesis. It is particularly relevant to those who wish to benefit from the research strengths of ANU.

 #1 in Australia for Physics and Astronomy\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in the field of Physics or Engineering with a GPA of 5.0/7.0 in those courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (1 semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (1 year full-time) of credit.

Courses completed in the Graduate Certificate of Nuclear Technology Regulation at ANU may contribute as credit towards the Master of Science in Nuclear Science.

## Program description

The Australian National University is the only university in Australia that offers postgraduate education in nuclear science and is the ideal location to pursue an advanced degree in this growing field.

Over two years, you will study the fundamentals and applications of nuclear science, including materials analysis, dating techniques, nuclear medicine, and nuclear energy. The degree is a mix of coursework and projects, comprising individual and group-based research. You will develop the scientific background you need for informed debates on nuclear issues, without advocating a particular position.

## Career opportunities

Our students go on to careers in policy development, defence, security or related fields, and on to careers in the nuclear industry. Examples of roles of our graduates include: TLD Operations Officer, Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and Process Engineer, Australian Nuclear Science and Technology Organisation (ANSTO).

[science.anu.edu.au/study/masters/master-science-nuclear-science](https://science.anu.edu.au/study/masters/master-science-nuclear-science)

# MASTER OF SCIENCE IN PRECISION INSTRUMENTATION AND MEASUREMENT

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2


**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830747 / 830748 (Advanced)

**CRICOS code:** 099248B / 099249A (Advanced)

**Cognate disciplines:** Physics, Engineering

 #1 in Australia for Physics and Astronomy\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in the field of Physics or Engineering with a GPA of 5.0/7.0 in those courses. Mathematics at least at the level of MATH2305.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

Measurement is at the heart of scientific discovery, and the frontiers of knowledge are expanded through the development of new and more precise instrumentation.

You will be learning from ANU scientists who have worked on projects including: the design and development of instrumentation for the Nobel-prize winning discovery of gravitational waves, a high-resolution ion microprobe for geological analysis, a high-resolution x-ray computed tomography instrument for the study of porous and disordered materials, and, an integral-field spectrograph for an international, next-generation, thirty-meter class optical telescope.

## Career opportunities

A Master's degree specialising in precision instrumentation and measurement provides you with the skills to develop the instrumentation technologies that underpin the advancement of science and industry. ANU has a strong pedigree in the development of new scientific instrumentation, and our graduates are highly sought-after and go on to find interesting careers in a range of areas.



## FACILITIES

### Advanced Instrumentation and Technology Centre (AITC)

The \$30-million Advanced Instrumentation and Technology Centre (AITC) at the University's Mount Stromlo Observatory is a world-class facility for the assembly, integration and testing of space-based instruments and small satellites. It includes the only space simulation facility in the southern hemisphere, the Wombat XL, which mimics the airlessness of space, as well as the dramatic temperature changes experienced by satellites moving in and out of the Earth's shadow.

## MASTER OF SCIENCE (ADVANCED) IN PRECISION INSTRUMENTATION AND MEASUREMENT

### Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0 and at least eight courses in the field of Physics or Engineering with a GPA of 5.5/7.0 in those courses. Mathematics at least at the level of MATH2305.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

The Advanced program extends your practical, coursework experience in precision instrumentation and measurement with the development and implementation of a research project supervised by an academic. You will be required to develop expertise in a nominated area through independent research and completion of a thesis. A Master of Science (Advanced) in Precision Instrumentation and Measurement can also lead to a PhD.

# MASTER OF SCIENCE IN QUANTITATIVE BIOLOGY AND BIOINFORMATICS

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2

**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830737 / 830738 (Advanced)

**CRICOS code:** 096439G / 096440D (Advanced)

**Cognate disciplines:** Computer Science, Mathematics, Statistics, Biology, Computational Chemistry

 #1 in Australia for Natural Sciences\*

\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in a cognate discipline with a GPA of 5.0/7.0 in those courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

The Master of Science in Quantitative Biology and Bioinformatics is a program that provides students with experience in the use of methods and tools to organise and analyse biological data, statistically, mathematically and computationally. The course caters to a range of students including students who have come from an undergraduate biological degree, by providing the appropriate mathematical and programming skills; to students with a more quantitative undergraduate background, by providing the necessary background in biology and biological data and analyses. Students also have the opportunity to learn about, and apply, techniques in client engagement and the real-world practice of consulting.

## Career opportunities

This program provides you with skills that are in high demand in a variety of areas including forensic science, agri-technology, the pharmaceutical industry, medical research, bioengineering and biotechnology.



## FACILITIES

### The Australian Phenomics Facility

The Australian Phenomics Facility specialises in the development, characterising and archiving of mouse models of human disease. It has an experienced genomics and bioinformatics capability focussed on the identification of single nucleotide polymorphisms and the phenotyping capability to make the biological associations with probable human disease traits.

## MASTER OF SCIENCE (ADVANCED) IN QUANTITATIVE BIOLOGY AND BIOINFORMATICS

### Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0 and at least eight courses in a cognate discipline with a GPA of 5.5/7.0 in those courses.

### Eligibility for credit

Applicants with a Bachelor degree, Honours, Graduate Diploma or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit.

### Program description

The Advanced program incorporates a research project supervised by an academic, and is a gateway to further research, such as a PhD. Students will develop work on an original research project that builds on, and applies, their knowledge of quantitative biological data analysis.



# MASTER OF SCIENCE IN QUANTUM TECHNOLOGY

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2


**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830741 / 830752 (Advanced)

**CRICOS code:** 099252F / 099253E (Advanced)

**Cognate disciplines:** Physics, Engineering, Mathematics

 #1 in Australia for Physics and Astronomy\*  
\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in a cognate discipline with a GPA of 5.0/7.0 in those courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

Quantum technologies such as computing, metrology and communications have the potential to vastly change our world, as they push us towards the Quantum Age. By exploiting quantum phenomena, society-changing technologies such as unbreakable cryptography or exponentially faster computers are poised to become a reality. Recently, many of these technologies have matured to the point that a commercial quantum industry is emerging. This has been met with huge investments from government and industry, both domestically and internationally.

## Career opportunities:

A Master degree specialising in quantum technology provides you with the skills to pursue a career at the forefront of the emerging quantum industry, including quantum computing, quantum communication, quantum metrology, policy surrounding quantum technologies or further study. ANU has a strong reputation in the field of quantum science, meaning our graduates are highly sought-after and go on to find interesting careers in a range of areas.



## FACILITIES

### National Computational Infrastructure (NCI)

The National Computational Infrastructure (NCI) is home to the Southern Hemisphere's most highly-integrated supercomputer and filesystems, Australia's highest performance research cloud, and one of the nation's largest data catalogues — all supported by an expert team. NCI is supported by the Australian Government's National Collaborative Research Infrastructure Strategy.

## MASTER OF SCIENCE (ADVANCED) IN QUANTUM TECHNOLOGY

### Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0 and at least eight courses in a cognate discipline with a GPA of 5.5/7.0 in those courses.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

The Advanced program provides you with the opportunity to extend your practical, coursework experience in precision quantum technology with the development and implementation of a research projects supervised by an academic. You will be required to develop expertise in a nominated area through independent research and completion of a thesis. It is particularly relevant to those who wish to benefit from the research strengths of ANU. A Master of Science in Quantum Technology (Advanced) can also lead to a PhD.

# MASTER OF SCIENCE IN THEORETICAL PHYSICS

## Key facts

**Duration:** Two years full-time (or less with credit)

**Semester intake:** Semester 1 or 2


**Indicative annual domestic fee:** \$33,520.00

**Indicative annual international fee:** \$48,802.00

**UAC code:** 830753 / 830754 (Advanced)

**CRICOS code:** 0101481 / 0101482 (Advanced)

**Cognate disciplines:** Physics, Engineering, Mathematics

 #1 in Australia for Physics and Astronomy\*

\*QS World University Rankings 2022

## Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.0/7.0 and at least eight courses in a cognate discipline with a GPA of 5.0/7.0 in those courses.

## Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

## Program description

The Master of Science in Theoretical Physics brings students to the cutting edge of research in an interactive training environment, being taught by some of the world's leading theoretical physicists. You will discover the breadth of theoretical physics, including understanding how non-linear dynamics can be applied to complex problems.

If you are interested in big questions, like how the universe works or how elementary particles interact with each other to form nuclei and stars, then you will enjoy learning about quantum field theory. With applications such as particle physics and condensed matter, quantum field theory is arguably the most far-reaching attempt to combine special relativity and quantum physics in a unique framework.

## Career opportunities:

Drawing on world leading expertise from the ANU Research School of Physics, this program will provide you with the techniques and skills necessary for a bright future in research or related careers in education, science and industry.



## FACILITIES

### Australian Plasma Fusion Research Facility (H-1NF)

The Australian Plasma Fusion Research Facility (H-1NF) is a uniquely versatile plasma research facility, located at ANU.

The heart of the facility is the H-1 Heliac, a large stellarator device which is the Australian focus of basic experimental research on magnetically confined plasma, important in developing fusion energy, a clean, virtually inexhaustible energy source.

## MASTER OF SCIENCE (ADVANCED) IN THEORETICAL PHYSICS

### Admission requirements

A Bachelor degree or international equivalent with a GPA of 5.5/7.0 and at least eight courses in a cognate discipline with a GPA of 5.5/7.0 in those courses.

### Eligibility for credit

Applicants with a Bachelor degree or Graduate Certificate in a cognate discipline may be eligible for up to 24 units (one semester full-time) of credit. Applicants with a Graduate Diploma or Honours in a cognate discipline may be eligible for up to 48 units (one year full-time) of credit.

### Program description

The Master of Science (Advanced) in Theoretical Physics program provides you with the opportunity to extend your practical and coursework experience in theoretical physics with the development and implementation of a research project supervised by an academic. This is particularly relevant to those who wish to benefit from the research strengths of ANU and pursue a career in research.

# 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 available number of projects from host organisations.

## Current internship hosts

- > ACT Health
- > Australian Academy of Science
- > Australian Institute of Health & Welfare
- > Endangered Heritage
- > Esri Australia
- > Fight Food Waste Ltd
- > NSW Biodiversity Conservation Trust
- > Relationships Australia
- > Safe Work Australia

## 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 2023 internships

### Semester 1:

Applications open early December 2022, close mid-January 2023.

### Winter Semester/Semester 2:

Applications open late March 2023, close mid April 2023.



## Tanya Javaid

### CSIRO Internship

Tanya completed an internship at CSIRO as part of her degree.

“Doing an internship is definitely worth it! It’s a great way to make some incredible contacts and learn about their work, as well as open yourself up to future opportunities.

Applying for an internship is pretty straightforward. I submitted an expression of interest to the ANU Science Internships Office and got called in for an interview at CSIRO. The University was very supportive, and the internship induction was also very informative.”



# 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

**EMSC6119**, 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

**ENVS6218**, 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.



## Advanced Field Studies in Functional Ecology

**BIOL6303**, 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.



## Island Sustainable Development: Fiji Field School

**ENVS6205**, offered by the Fenner School of Environment and Society

Small island states face considerable challenges as they attempt to achieve sustainable development. This field trip aims to give students a first-hand experience of the real-world circumstances that confront an island nation by exploring important sectoral themes in the context of sustainable development.

[science.anu.edu.au/study/student-experience/field-trips](https://science.anu.edu.au/study/student-experience/field-trips)

# CANBERRA

Australia's capital, Canberra, is a thriving city of over 400,000 set within a classic Australian bush landscape. Etched with bike paths and walking trails, and serviced by reliable public transport, it's easy, fast and affordable for students to get around.

Ranked third on Lonely Planet's "Best cities to travel to in 2018"<sup>1</sup>, Canberra is a unique city that offers tourists different experiences all year round.

## Here's our pick of why it's great to study, work and live in Canberra

### Enviably lifestyle

Canberra has earned the number one spot on the Numbeo Quality of Life Index list in 2017 - 2022. Canberra was also ranked the world's best city to live by the OECD two years running in 2014 and 2015.

### University town

Over 25% of the Canberra population are students<sup>2</sup>.

### Safest cities

Canberra is considered one of the safest cities in Australia with one of the lowest crime rates<sup>3</sup>.

### Leader of the nation

You'll have great resources at your doorstep with 12 national institutions including Australian Parliament House, the National Library of Australia, the High Court of Australia and ... ANU of course.

### Less time in transit

Canberra has the shortest commute times of any major Australian city. You can drive to anywhere in Canberra is less than 30 minutes so you will spend more time doing what you want to do and less time sitting in traffic.

### Take flight

Decrease the chaotic airport rush with a short and traffic-free drive to the airport. Canberra International Airport offers over 800 flights a week around Australia, Singapore and Doha.

### Close to major cities

It is only a three-hour drive to Sydney and seven-hour drive to Melbourne. Or you can fly direct to either of the cities in just over one hour.

### Sea or Snow

Enjoy the summer with a two-hour road trip to the crystal blue waters of beaches like Batemans Bay and Nowra, or head in the opposite direction to hit the powdery slopes of the Snowy Mountains during the colder months.

### Cash in

Canberrans earn Australia's highest average weekly income<sup>4</sup>.

### Cosmopolitan

Home to foreign missions and diplomats, Canberra has a diverse multicultural community and is home to the National Multicultural Festival.



1. ACT Government 2. Study Canberra 3. Numbeo  
4. Australian Bureau of Statistics



Australian  
National  
University

## Contact us

ANU College of Science  
The Australian National University

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

### Student enquiries

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

### Connect with us



[facebook.com/ScienceANU](https://facebook.com/ScienceANU)



[twitter.com/ScienceANU](https://twitter.com/ScienceANU)



[instagram.com/ScienceANU](https://instagram.com/ScienceANU)



[linkedin.com/showcase/anu-colleges-of-science](https://linkedin.com/showcase/anu-colleges-of-science)