

Chemistry
Environment
Palaeontology
Biotechnology
Forensics
Physics
Mathematics



## **Science**

### **Environment**

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Flinders University acknowledges the Traditional Owners on lands in which its campuses and centres are located and honours Elders past and present. These are the traditional lands of the Arrernte, Barngarla, Boandik, Dagoman, Erawirung, Gunditjmara, Jawoyn, Kaurna, Larrakia, Nauo, Ngadjuri, Ngarrindjeri, Peramangk, Ramindjeri, Wardaman, Warumungu and Yolngu peoples, spanning across South Australia, the Northern Territory and Victoria.



### Choose your degree

Flinders University offers degrees across a range of scientific fields. From environmental science to physics, chemistry, palaeontology and more, choose a degree that reflects your passions and graduate with the skills and knowledge to take your place in an ever-changing world.

### Be taught by scientific leaders

Flinders University's science degrees are taught by experts in their fields, including multiple-award-winning researchers and world-renowned scientific innovators whose discoveries are changing the ways we look at and interact with the world around us.

### Study towards a rewarding career

Careers in scientific fields are incredibly varied. Environmental changes, technological advances and a focus on the ways in which human activity is impacting the planet are creating new opportunities. Scientific careers can be rewarding in many ways. Projected employment growth through to November 2025 is strong across multiple areas, such as:

Natural and Physical Science Professionals 8.8% Environmental Scientists 7.7% Geologists, Geophysicists and Hydrogeologists 15.3%

Source: 2020 National Skills Commission projections

### Gain real-world experience

Flinders' Work Integrated Learning (WIL) enables you to gain work experience while you study. You'll have the opportunity to gain real-world experience through placements, practicums, field studies and simulated workplace settings and assessment activities. Flinders aims to provide each and every student with access to a WIL opportunity during their studies.

"The work placement teaches you how to apply your knowledge in an unstructured way, which is very different to the type of stuff you will do in university. Micro-X has given me the opportunity to meet and work with lots of experienced industry professionals with very diverse backgrounds in different fields. I've been in meetings and on calls with people who work all around the world."

### **David Bunting**

Bachelor of Science (Honours) (Physics)

# No. 1 in Australia in Science & Mathematics for learning resources\*

\* The Good Universities Guide 2021 (postgraduate)

## **Environment**

As our population increases and we continue to understand more about the environmental challenges facing our planet, environmental careers will only gain more importance.

### Gain diverse knowledge and skill sets

Throughout your studies, you'll examine and understand the components of the earth system: atmosphere, biosphere, hydrosphere and geosphere. Gain a broad spectrum of knowledge for a range of career opportunities.

### Learn to analyse, identify and adapt

There's nothing more gratifying than doing something you love in an exciting field. Science underpins almost every facet of our society, and the range of careers in science is broad. From government departments to environmental organisations and private industry, you can pursue your passion and build a rewarding future.

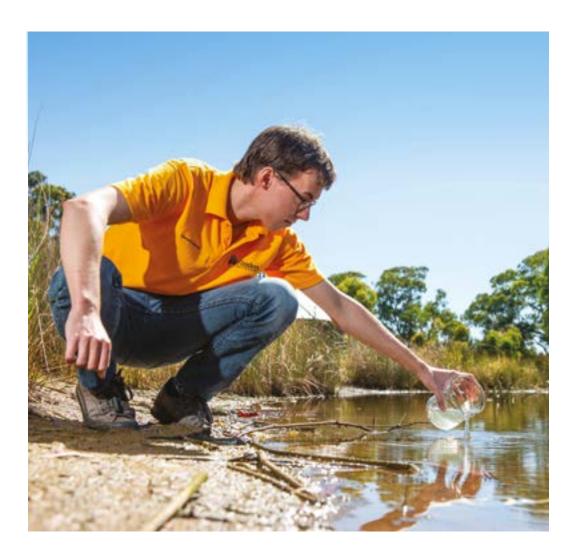
### Create a sustainable future

With an environmental degree, you'll gain the skills and practical experience required to address challenges – such as climate change, biodiversity, deforestation, air and water pollution and species extinction – with an understanding of the political and developmental dimensions to global environmental threats.

No.1 in SA in Science & Mathematics for median salary, learner engagement, learning resources, overall quality of educational experience, skills development and student support\*\*

\*\* The Good Universities Guide 2021 (undergraduate), public SA-founded universities only

## Oaklands Wetland award-winning classroom



Flinders' commitment to environmental research and teaching is fully realised in The Oaklands Education Centre, an award-winning, purpose-built home for the partnership between the City of Marion and Flinders University.

The centre provides a place for education, research and studies into wetlands and showcases the site's stormwater re-use scheme.

In April 2021, the Flinders classroom at Oaklands Wetland was recognised at a National Awards ceremony for its STEM outreach activities engaging high school and university students with hands-on experience in stormwater monitoring and enabling research projects.

Oaklands Wetland plays an important role in the community. Around 85,000 new plants have created a habitat for many different species of animals, including parrots, ducks, cockatoos and wader birds such as spoonbills, ibis and gulls. Fish and frogs live in the wetland, plus many different types of insects like dragonflies and mayflies.

The wetland is fully operational and can treat up to 400 million litres of stormwater each year.

Image: Flinders University PhD student Peter Reeve tests the water at Oaklands Wetland.

## Bachelor of Applied Geographical Information Systems (GIS)

In this degree, you'll be taught skills to support change and growth in areas like global warming, urban planning, mining and exploration, archaeology, transportation and biodiversity management. We integrate field-based data acquisition with modern technology, computer workshops and classroom-based theory.

SATAC code	214591
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	70.00
Guaranteed entry selection rank	70.00
TAFElink	Cert IV or above
Adjustment factors available	Yes



- Study at a university that leads Australia in implementing and teaching
  the latest geospatial technologies including Esri's ArcGIS Enterprise
  Geospatial Platform. Study a secondary area including biology,
  geography and environmental studies, archaeology and criminology.
  Gain practical experience and develop on-the-job use of a range of
  relevant digital technologies in our dedicated Spatial Information Systems
  Laboratory
- Benefit from teaching and research in ground-based LIDAR and image spectrophotometers.
- Develop contacts and work skills through an industry placement in an environmental agency.
- The degree meets the international standards of geospatial science.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- geographic analyst
- GISc data coordinator
- GISc technician
- geospatial specialist
- · mapping technology officer
- natural resource information officer
- · remote sensing officer
- spatial ecologist/scientist.

### Potential employers include:

- · government departments
- regional development centres
- agriculture and horticulture centres
- not-for-profit agencies
- mining, oil and gas, water, forestry and agriculture industries
- Australian Bureau of Statistics (ABS).

### **Bachelor of Arts and Science**

Your career could cover science and the arts. With majors available from creative arts, humanities, law, science, mathematics, computing, and social and behavioural sciences, you'll graduate ready to take on the world.

SATAC code	234011
Prerequisites	None
Assumed knowledge	None
2021 Minimum selection rank	70.00
Guaranteed entry selection rank	75.00
TAFElink	Dip or above
Adjustment factors	Yes



- This degree allows you to study both arts and science without having to complete a double degree.
- Select an arts and science major from over 40 disciplines and develop transferable skills highly valued in a wide range of jobs and industries.
- Develop skills in hard science with a deeper appreciation of the role of science in society.
- Develop hands-on skills through project-based learning including live industry projects, and undertake a professional placement in your final year.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- · communications and customer service officer
- · policy project officer
- · scientific officer
- · community education officer
- science management assistant.

- · government departments
- community arts centres
- education/higher education
- media
- · marketing organisations.

### **Bachelor of Science (Animal Behaviour)**

## Bachelor of Science (Animal Behaviour) (Honours)

Learn about the behaviour of insects, birds, fishes and mammals. Global academic experts will teach you how to collect, analyse and understand information relevant to animal behaviour and how to communicate this information to a variety of audiences.

SATAC code	234211
SATAC code (Honours)	234361
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes



- Get hands-on experience with lab work, fieldtrips and camps where you
  can witness and analyse animal behaviour in the field from your first year.
- Academics have close relationships with industry partners and government organisations, increasing employment opportunities.
- Study in our new state-of-the-art Animal Biodiversity and Conservation Facility to be completed in 2021.
- Take advantage of study abroad opportunities in places such as Africa, Fiji, Maldives, Philippines and Palau, and get real-world experience in a new country while earning credit toward your degree.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- zoo keeper
- animal caretaker
- field naturalist
- wildlife ecology research scientist
- natural resource management officer
- · marine parks officer.

### Potential employers include:

- government departments
- regional development centres
- agriculture and horticulture centres
- not-for-profit agencies
- mining, oil and gas, water, forestry and agriculture industries
- Australian Bureau of Statistics (ABS).

## Bachelor of Science (Biodiversity and Conservation)

## Bachelor of Science (Biodiversity and Conservation) (Honours)

The world has never been more attuned to environmental issues or the need to train and employ specialists who can help us reduce our impact and plan wisely for the future.

SATAC code	234221
SATAC code (Honours)	234371
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes



- Develop the theory and skills that blend foundation science with Indigenous science. Analyse and interpret the impacts of key environmental drivers such as habitat destruction and fragmentation, changing climates, altered fire regimes and invasive species.
- Learn the principles of reserve design, habitat restoration and other means of conserving species affected by human impacts.
- Graduate prepared for negotiations with traditional custodians, local community groups, NGOs and governments responsible for land-use management and conserving biodiversity assets.
- Get hands-on experience by developing your lab skills, conducting experiments and going on fieldtrips.
- Work with industry on real-life conservation projects and biodiversity management
- Learn about real-life and current conservation management techniques.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- biodiversity conservation officer
- · biodiversity project officer
- conservation programs assistant
- graduate ecologist
- national park officer.

- national parks
- museums
- education bodies
- research and development authorities
- mine-site rehabilitation bodies
- environmental monitoring departments.

### **Bachelor of Science (Environmental Science)**

## Bachelor of Science (Environmental Science) (Honours)

This degree focuses on understanding, monitoring and improving the environment. Expand your knowledge, obtain hands-on practical skills and learn critical thinking about environmental issues and problems.

SATAC code	234271
SATAC code (Honours)	234421
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes



- Graduate prepared to work as a professional in one of the most exciting areas of modern science.
- Examine how natural processes and their changes impact human society and how human activities interact with and modify environments.
   Understand the components of the earth system: atmosphere, biosphere, hydrosphere and geosphere.
- There are opportunities to take your studies overseas through internships and short-term study abroad programs.
- Study the global interactions between water and ecosystems, human and environment, geology and mining, dryland and salinity.
- Explore connections of Australia and the globe via oceans and the atmosphere, and interactions of society and environment via water and ecosystems.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- environmental scientist
- environment protection officer
- water policy officer
- environmental education officer
- environmental scientist
- environment sustainability advisor
- environmental project manager.

### Potential employers include:

- Murray-Darling Basin Authority
- Department of Environment and Water
- Bureau of Meteorology
- Environment Protection Authority
- SA Water
- city councils
- mining industry such as Rio Tinto
- · consulting firms such as Jacobs
- research institutes such as CSIRO.

### **Bachelor of Science (Marine Biology)**

### **Bachelor of Science (Marine Biology) (Honours)**

The range of specialty areas and career opportunities in marine biology is expansive. In this degree, you will gain extensive knowledge in marine biodiversity, ecology, genetics, conservation, fisheries and related areas, and build transferable skills.

SATAC code	234301
SATAC code (Honours)	234451
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes

3 years full-time
Honours
4 years full-time
+ yours run time
Part-time available
Deferrable
Deferrable

- There are marine biologists who study the behaviour and physiology of marine animals or the growth of algae and seagrasses. Some adopt a larger perspective and study the dynamics of marine populations and communities or how entire marine ecosystems function.
- Get a broad understanding of the biology of marine organisms, their relationships with the physico-chemical marine environment and their potential responses to changes.
- Learn from internationally eminent marine biologists and oceanographers.
   Participate in marine-based fieldwork, including field trips to different marine bio-regions. Study in our new state-of the-art Animal Biodiversity and Conservation Facility.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- · fisheries scientist
- marine biologist
- · marine and coastal community education officer
- marine parks manager
- · marine parks scientist
- · marine policy officer
- · oceans science project officer.

- · Australian Institute of Marine Science
- Department of Environment and Water
- · Great Barrier Reef Marine Park Authority
- Kangaroo Island Natural Resources Board
- oil and gas companies
- South Australian Research and Development Institute.

### **Combined degrees**

Combining your degree with a qualification in another discipline will help you develop specialised abilities to stand out from the pack. Studying a combined degree at Flinders is the key to enhancing your career opportunities.

**Example degree combinations:** 

### **Bachelor of Science (Forensic and Analytical Science)/Bachelor of Criminology**

### **SATAC CODE 234281**

Forensics and analytical science open up career options in areas such as illicit drug testing, DNA analysis, trace evidence examination and toxicology. Combine a hands-on experience of collecting, analysing and identifying physical evidence with an understanding of the workings of the criminal justice system.

### Bachelor of Science (Environmental Science)/ Bachelor of Archaeology

### SATAC CODE 234271

Obtain hands-on, practical skills around environmental issues and gain an understanding of the impacts of past, present and future societies on our environment.

## Bachelor of Engineering Technology (Electronic Systems and Security)/Bachelor of Science (Physics)

### **SATAC CODE 244421**

Explore a unique and exciting pathway to work in a cutting-edge high-technology area. The pairing of a Bachelor of Engineering Technology with a Bachelor of Science in physics represents a pathway to a well-paid and life-long career at the forefront of electronic and electromagnetic technologies.

For a full list of combined degree options visit flinders.edu.au/combineddegrees





# No. 1 in AUSTRALIA for learning resources in Science & Mathematics\*

\* The Good Universities Guide 2020 (postgraduate)

## **Science**

From advances in biotech, to the discovery of a long-forgotten prehistoric creature or the thrill we feel when a new probe lands on Mars, science excites us all. Turn your passion for discovery into a career.

### Uncover secrets, discover answers

The world of science is a lot more exciting than it looks on The Big Bang Theory. A career in science can quite literally change the world. You could play a part in making new discoveries, helping us understand some of the deepest questions about who and what we are, and how our universe works.

### **A Rewarding Career**

There's nothing more gratifying than doing something you love in an exciting field. Science underpins almost every facet of our society, and the range of careers in science is broad. From government departments to environmental organisations and private industry, you can pursue your passion and build a rewarding future.

### Study real-world science with the best

From the world-renowned expert leading Australia's only dedicated undergraduate degree in palaeontology to the recipient of the 2020 Prime Minister's Science Prize for New Innovators, studying science at Flinders means studying at a university with leading researchers and educators. Flinders' science degrees are underpinned by strong links to industry and a wide range of research expertise in areas such as biotechnology, groundwater hydrology, and forensic and environmental science.

# No. 1 in SA in Science & Mathematics for overall experience\*\*

\*\* The Good Universities Guide 2021 (undergraduate) public SA-founded universities only

"What makes Flinders special is



"My learning experience at Flinders was absolutely amazing! I had the opportunity to work alongside many great minds who have now become mentors and friends. I have developed not only effective collaborations but also friendships that are definitely making a positive impact in my journey as a scientist.

Flinders is a great university to consider pursuing a degree... the extent of academic experience, the high-quality libraries, the academic reputation, the conducive learning environment, access to state-of-the-art facilities and the strategic location. Flinders University ticks all those boxes."

**Dr Kasturi Vimalanathan** 

PhD (Chemistry)

### **Bachelor of Mathematical Sciences**

### **Bachelor of Mathematical Sciences (Honours)**

In this degree, you'll gain a foundation in the principles and techniques of modern mathematics and learn how to apply these skills to solve today's problems. The degree is designed to produce industry-focused graduates who are in demand in a range of careers that use mathematics.

SATAC code	224631
SATAC code (Honours)	224641
Prerequisites	Yes*
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes

\* SACE stage two specialist mathematics or mathematical

3 years full-time
Honours 4 years full-time
Part-time available
Deferrable

- Your studies will focus on both pure and applied mathematics and statistics.
- You can choose topics in other disciplines that use applied mathematics, such as medicine, business, physics and the environment.
- You'll develop advanced research, communication and technical skills.
- Focus on advanced pure and applied mathematics in our Mathematical Sciences Laboratory.
- The degree is designed to exceed the Australian Mathematical Society's accreditation standards.
- Join the university that produced Australia's Fields Medal winner, Professor Terence Tao.

### Career opportunities

methods or equivalent

Your degree could open up a range of employment opportunities, including:

- · credit bureau analyst
- data and analytics officer
- consultant data analytics
- quantitative assistant trader
- consumer research executive.

### Potential employers include:

- Mercer
- Bureau of Meteorology
- Australian Bureau of Statistics
- The Nielsen Company (Australia)
- Australian Securities and Investments Commission.

### **Bachelor of Science**

You don't need a science background to start a career in science, you just need an inquiring mind. This degree will equip you with crucial transferable skills, in problem solving, communication, teamwork and computing, that will open up career pathways and research opportunities in a broad and exciting range of professional areas.

SATAC code	234511
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	60.00
Guaranteed entry selection rank	70.00
TAFElink	Cert IV or above
Adjustment factors available	Yes



- Follow your interests in core sciences from a diverse range of disciplines.
- You have the flexibility to explore a specific area while getting a broad foundation in science by studying a major or gaining more specific expertise and a named degree by studying a specialisation.
- The degree provides you with practical experience that prepares you for the workplace through project-based learning.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- · laboratory technician
- intellectual property analyst
- bioinformatics technician
- · research assistant
- · graduate ecologist.

- GHD
- Bureau Veritas Australia
- CSIRO
- SA Water
- Department of Agriculture.

### Bachelor of Science (Honours) -Enhanced Program for High Achievers

Discover where science can take you and where you can take science. If you're a student of exceptional academic ability, this enhanced program provides opportunities to embark upon research in every year of the degree.

SATAC code	214721
Prerequisites	Yes*
Assumed knowledge	None
2021 Selection rank	90.00
Guaranteed entry selection rank	95.00
TAFElink	Advanced Diploma
Adjustment factors available	Yes

or equivalent: biology, mathematical methods, specialist

mathematics, chemistry, physics, geology.

4 years full-time
Part-time available
Deferrable

- Join a cohort of highly intelligent students with similar interests and capabilities.
- Be mentored by research staff and postgraduate students in your first year.
- Undertake professional placements integral to your research training.
- Web-based course materials and video lectures are offered in some subject areas and help to make the program even more accessible.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- biologist/marine biologist
- · chemist/biochemist hydrologist
- physicist
- statistician/biostatistician
- mathematician
- · nanotechnologist.

### Potential employers include:

- university and research organisations
- CSIRO
- Defence Organisations, DST
- Australian Centre for Plant Functional Genomics
- The Walter and Eliza Hall Institute of Medical Research
- Australian Nuclear Science and Technology Organisation
- Department of Environment and Water.

# Make the systematic pursuit of knowledge your passion with a Bachelor of Science

Flinders gives you the flexibility to choose from major areas of study across the University's wide range of science disciplines.

### **Majors**

The broad range of majors available enables you to construct a study program that suits your interests. The following major areas of study are available at Flinders:

### Animal biology

The animal biology major involves the study of living terrestrial, avian and aquatic animals.

### **Aquatic biology**

Aquatic biology involves the biology of marine and freshwater aquatic life.

### Biochemistry and molecular biology

The biochemistry and molecular biology major explores the building blocks of life.

### Chemistry

Chemistry affects almost everything we do or use: from drugs, antibiotics and anaesthetics to polymers and plastics through to synthetic fibres and batteries.

### Cognitive science

Cognitive science is the scientific study of the mind and its processes in both humans and machines.

### Computer science

The computer science major provides you with a broad background in programming, databases, networks and computer systems.

### **Ecology and evolutionary biology**

The ecology and evolutionary biology major introduces you to the study of living animals, plants and fungi.

### **Environmental geology**

The environmental geology major examines how geological processes and hazards influence human activities and vice versa.

### Environmental hydrology and water resources

The environmental hydrology and water resources major gives you a broad background in natural sciences including earth sciences, environmental sciences and marine sciences.

### **Environmental management**

The environmental management major aims to give you an understanding of the complexity and contexts of environmental decision-making.

### Geography

The geography major provides a broad foundation in geography.

### Mathematics

The mathematics major provides a firm foundation in the basic principles and techniques of modern mathematics.

### Microbiology

The microbiology major involves the study of evolution, biodiversity, chemistry, biostatistics and immunology.

### Ocean and climate sciences

The ocean and climate sciences major provides you with a deeper understanding of the physical processes shaping the marine environment and influencing climate.

### **Physics**

The physics major provides an understanding of the fundamental laws of nature.

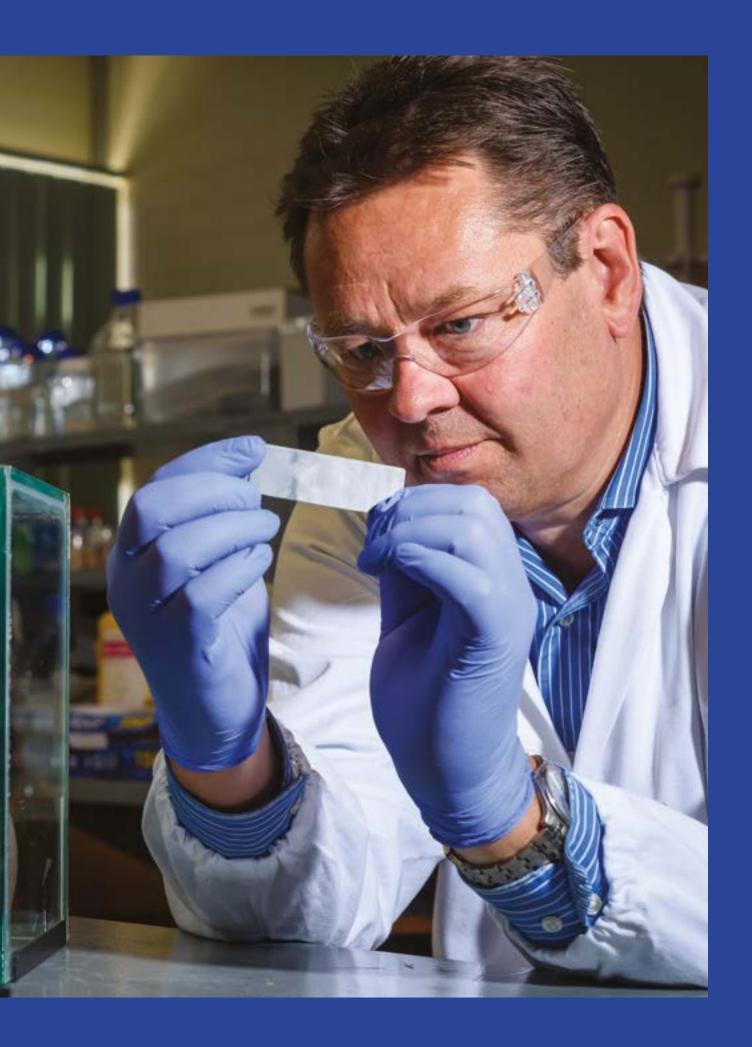
### Plant biology

The plant biology major involves study in areas including Australian environmental change, diversity of plants and algae, animal and plant physiology, and food biotechnology.

### **Statistics**

The statistics major involves the use of mathematics, data science, biostatistics, probability and stochastic processes to analyse and solve complex statistical problems.





### **Bachelor of Science (Biotechnology)**

### **Bachelor of Science (Biotechnology) (Honours)**

Begin a career in biotechnology, considered the growth technology of the twenty-first century – with job opportunities to match. The degree is underpinned by knowledge in entrepreneurial and corporate biotechnology.

SATAC code	234521
SATAC code (Honours)	234541
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes



- Graduate prepared to work as a professional in one of the most exciting areas of modern science by combining theory and specialised practical training in the life sciences with the study of related business, legal, ethical and social issues.
- You don't need a background in science, just an inquiring mind.
- Practical lab sessions prepare you for a scientific career.
- You'll have the opportunity to undertake project placements within the University, Flinders Medical Centre or the biotechnology industry.
- Participate in one-on-one mentoring sessions with industry and medical research leaders.
- Understand science in the global market through commercialisation, entrepreneurship, financial management and business.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- biotechnologist
- bioanalytical quality assurance associate
- biodiscovery research officer
- graduate research assistant
- · medical information associate.

### Potential employers include:

- Australian Centre for Plant Functional Genomics
- Bionomics
- Department of Industry, Innovation and Science
- Murdoch Children's Research Institute
- Novozymes.

### **Bachelor of Science (Chemical Sciences)**

## Bachelor of Science (Chemical Sciences (Honours)

Build a career in the science central to all other sciences. Gain a broad-based foundation in chemistry, acquire extensive knowledge in the area and graduate job-ready.

SATAC code	234231
SATAC code (Honours)	234381
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes



- You'll learn how to understand and apply chemical principles to solve problems, master lab techniques and equipment, undertake chemistry research and communicate your findings.
- You don't need a background in science, just an inquiring mind.
- This degree provides you with practical experience that prepares you for the workplace through a professional placement in your final year.
- Master the various laboratory techniques and instrumentation used in diverse chemical fields.
- There are opportunities to take your studies overseas through internships and short-term study abroad programs.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- analytical chemist
- · assistant formulation chemist
- · graduate chemist
- graduate quality control chemist
- laboratory metallurgical technician.

- DuluxGroup
- · Advent Pharmaceuticals Pty Ltd
- Phytovision Pty Ltd
- Western Australia Specialty Alloys (WASA)
- SA Water.

## Bachelor of Science (Forensic and Analytical Science)

## Bachelor of Science (Honours) (Forensic and Analytical Science)

## Bachelor of Science (Forensic and Analytical Science) Pathway

Work towards a fascinating career using chemistry and biology to analyse evidence, help investigate crime and contribute to justice. Forensic and analytical chemistry combines the practices of analytical chemistry and forensic investigation. Forensic biology uses aspects of life sciences to examine biological material in a forensic context.

234281
234431
234171
Yes*
None
None
70.00
80.00
60.00
70.00
80.00
70.00
Cert IV or above
Diploma or above
Cert IV or above
Yes

3 years full-time	
Honours	
4 years full-time	
4 years run time	
Pathway 1 year full-time	
,	
Part-time available	
Deferrable	

- Get hands-on experience during laboratory practicals and learn how forensic technologies are applied to real-life cases.
- Your degree opens career options in areas such as illicit drug testing, DNA analysis, trace evidence examination and toxicology.
- This degree has strong links with Forensic Science South Australia and other agencies and researchers around the world.
- You'll be able to access research facilities among Australia's best, and undertake research in the field.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- forensic chemist, forensic biologist or forensic toxicologist
- analytical chemist
- forensic technical assistant
- · formulation chemist
- · graduate chemist.

### Potential employers include:

- Forensic Science SA
- · Australian Federal Police
- Defence Science and Technology Group
- Victorian Institute of Forensic Medicine.



"Choosing Flinders gave me an opportunity to study forensics in a broad way by covering laboratory vs field options and biological vs chemical forensics for future pathways. I feel confident knowing that my teaching staff have my best interest at heart and I can meet with them if I have any questions to gain clarity in lecture and assessment content. This ensures my own goals are met and I get the best outcome for my end of semester results. The campus has beautifully set up study areas that were designed around human interaction that people can immediately feel comfortable in. Flinders fulfills all my expectations and checks all my boxes."

### **Gabrielle Ziersch**

Bachelor of Science (Forensic and Analytical Science)

### **Bachelor of Science (Palaeontology)**

### **Bachelor of Science (Palaeontology) (Honours)**

Turn your passion into a career with Australia's only palaeontology degree. Gain the tools necessary for palaeontological careers anywhere in the world, such as working in a museum, evolutionary studies, fieldwork, ecological/environmental research, teaching or science communication.

SATAC code	224061
SATAC code (Honours)	224051
Prerequisites	None
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes

3 years full-time	
Honours 4 years full-time	
Part-time available	
Deferrable	

- Study the first and only named palaeontology degree in Australasia.
- Learn in our purpose-built palaeontology laboratories.
- Combine specialist palaeontology study with biodiversity and conservation, animal behaviour, visual arts, earth and environmental science, and biostatistics.
- Learn about the key stages in the history of vertebrates, including the transition to living on land and how environmental changes have shaped the evolution of the modern Australian fauna.
- Examine the anatomy and behavioural characteristics of vertebrates through time to gain a better understanding of how they moved, what they ate and how they reproduced.
- Understand how the fossil record helps us resolve important patterns in human evolution and why we are the only species of human left on the planet.

### Career opportunities

Your degree could open up a range of employment opportunities, including:

- museum curator or collection manager
- university or museum researcher
- interpretation/education officer
- · technical officer
- fossil preparator
- · scientific consultant
- palaeo artist.

### Potential employers include:

- universities (researcher/teacher)
- museums (curator/collections manager)
- science media agencies.

## FROM THE FIELD



### Access state-of-the-art equipment

Australia's largest cabinet Micro-CT scanner, housed at Flinders University's Tonsley campus, enables industry and South Australian researchers such as Associate Professor Egon Perilli and Professor John Long to scan large human bones, ancient fossils and machine parts with unprecedented levels of detail and reveal fresh insights about the makeup of 3D objects.

The state-of-the-art piece of equipment enables 3D-scanning of large and heavy samples weighing up to 50 kilograms, including human limbs, prosthesis devices, engineered structures, batteries, plants, fossils, vertebrates and 3D composite materials.

Associate Professor Egon Perilli with students Qi Hu and Salina Chu with the Micro-CT scanner at Flinders' Tonsley campus.



### **Experience science in the real world**

Flinders Science gives you the opportunity to develop real-world, practical skills in your chosen field. You'll study alongside experts such as Strategic Professor in Palaeontology John Long, a world-renowned palaeontologist, whose recent work with an international team has revealed startling new insights into how the human hand evolved from fish fins

Professor John Long and Ben King in the Simpson Desert, Devonian fossil site in Queensland



### **Bachelor of Science (Physics)**

### **Bachelor of Science (Physics) (Honours)**

Gain a solid foundation in physics and mathematics, and acquire extensive knowledge in the area. You will learn to understand physics at a deeper level, apply scientific principles in a physics context and understand the role of physics in society.

SATAC code	234341
SATAC code (Honours)	234491
Prerequisites	Yes*
Assumed knowledge	None
2021 Selection rank	70.00
2021 Selection rank (Honours)	80.00
Guaranteed entry selection rank	70.00
Guaranteed entry selection rank (Honours)	80.00
TAFElink	Cert IV or above
TAFELINK (Honours)	Diploma or above
Adjustment factors available	Yes
* Knowledge of SACE stage two physics and methods or equivalent is assumed.	l mathematical

3 years full-time
Honours 4 years full-time
Part-time available
Deferrable

- $\bullet$  Use your mathematical ability as a language for physics.
- Develop an intuitive knowledge of physics principles.
- Operate the scientific instruments commonly used in physics.
- Retrieve and present information about physics in a scientific manner, including communicating effectively with a variety of audiences.
- Gain practical experience that prepares you for the workforce.
- The degree is designed to be accredited by the Australian Institute of Physics.

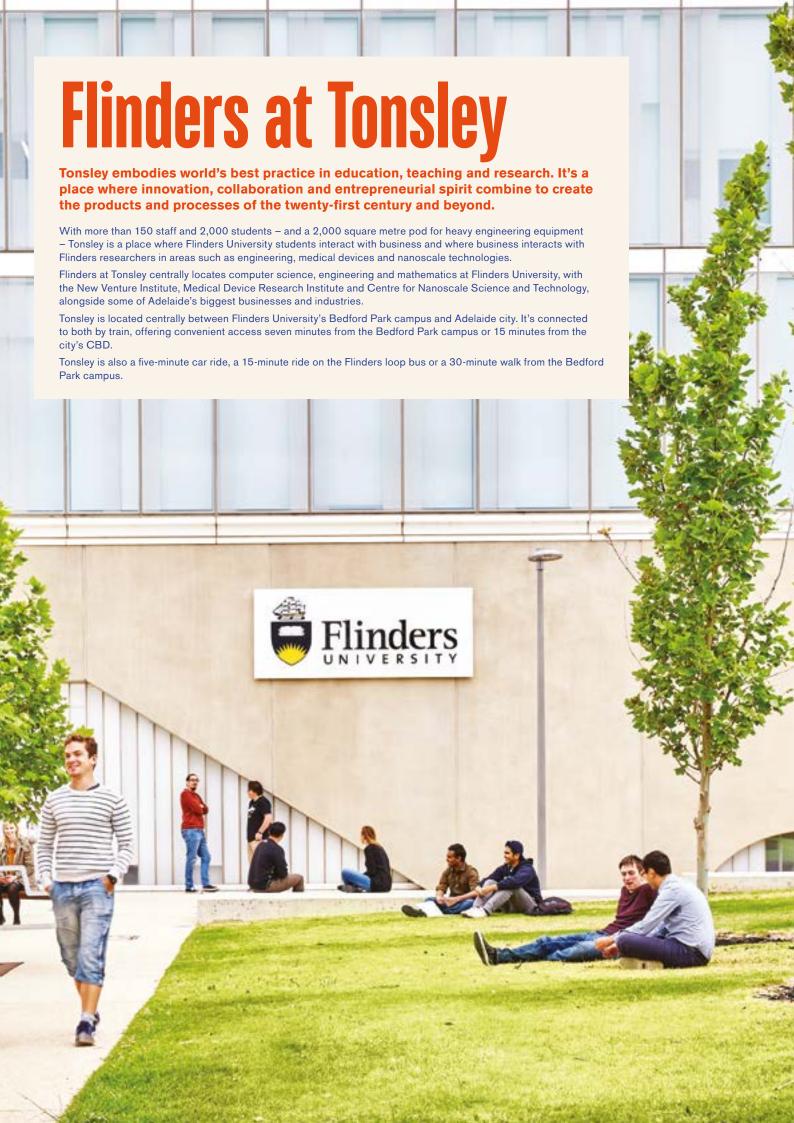
### Career opportunities

Your degree could open up a range of employment opportunities, including:

- graduate physicist
- defence scientist
- research scientist in sonar systems
- scientific officer, teacher
- NASA intern
- junior quantitative researcher –systematic trading strategies.

- Defence Science and Technology Group
- ANSTO
- CSIRO
- Cochlear
- Tibra Capital
- Department of Industry, Innovation and Science
- university and research organisations.





# Starting at Flinders

One of the world's top universities, Flinders offers students a supportive, inclusive education in an unrivalled study environment.



## Flinders is ranked in the top 2% of universities in the world\*

\* THE World University Rankings 2020 as a percentage of the total number of universities in the world according to the International Association of Universities

## Get more out of your study

### **Combined degrees**

Combining your degree with a qualification in another discipline will give you more expertise and expand your career prospects. Studying a combined degree at Flinders will help you stand out from the crowd. A combined degree is a combination of two Flinders bachelor degrees. As a combined degree graduate you will have two qualifications in just one to one-and-a-half years of extra study.

Our combined degree programs are designed to enhance your educational, academic and professional qualifications while minimising the cost and length of your studies. Flinders' combined degrees allow you to undertake in-depth study in exciting combinations that aren't usually available in single degrees.

flinders.edu.au/combineddegrees

## Begin your journey to a successful career

### Flinders diplomas

Flinders' diploma-level qualifications give you the chance to experience university life without having to commit to long-term study.

The one-year Diploma of Business or Diploma of Arts give you the chance to explore a range of interests, and successful completion allows you to apply for up to one year of credit towards a range of bachelor degrees, and guaranteed entry to the following courses:

- · Bachelor of Archaeology
- Bachelor of Arts
- Bachelor of Arts pathway to Education (Primary R-7)
- Bachelor of Arts pathway to Education (Secondary)
- Bachelor of Arts pathway to Psychological Science
- · Bachelor of Business
- Bachelor of Business (Human Resource Management, International Business, Management, Marketing, Sports Management)
- Bachelor of Business Economics
- Bachelor of Creative Industries (Digital Media, Film and Television, Interactive Design, Theatre and Performance, Writing and Publishing, Festivals and Arts Production)
- Bachelor of Disability and Community Inclusion
- Bachelor of Disability and Developmental Education
- Bachelor of Engineering Science
- · Bachelor of Information Technology
- Bachelor of International Business (Wine, Spirits and Tourism)
- Bachelor of International Relations and Political Science
- Bachelor of Law and Society
- Bachelor of Science

Standard University admission requirements apply.

flinders.edu.au/diplomas

## Pathways to study

Whether you are a school leaver or returning to study at a later date, there are many ways to gain admission to Flinders University. Explore your options and find the entry path that's right for you.

## If you have secondary education

### **Year 12 Entry**

Most Year 12 applicants enter university via the traditional entry method, where offers are made to eligible applicants with the highest selection rank until all places in the degree are filled. Your selection rank is used by Flinders to assess your admission to a course and is based on your ATAR plus any adjustment factors for which you are eligible.

satac.edu.au

### **Guaranteed entry**

If you achieve an ATAR equal or above the published guaranteed entry selection rank (and you meet course prerequisites) you will be guaranteed a place at Flinders. We offer guaranteed entry for most courses.

### **Indigenous Admission Scheme**

The Indigenous Admission Scheme provides an alternative pathway for Aboriginal and Torres Strait Islander people, who may not have been able to gain entry to university by traditional means, with the opportunity to study at Flinders.

See page 27 for further details

### **Elite Athlete Pathway**

If you've officially represented your school or state at a national level competition, we'll consider your school's recommendation about your academic potential when you apply.

flinders.edu.au/study/sport/elite-athletes

### **Research Project B Pathway**

If you have strong results in the Research Project B subject you will be considered for entry into Flinders on the basis of your Year 12 results and Research Project B performance.

flinders.edu.au/study/pathways/year-12-entry/research-project

### **School Recommendation Program**

We may consider your school's recommendation about your academic performance as part of your admission into Flinders.

### uniTEST

If you're in Year 12, uniTEST is available to enhance your chances of getting into Flinders. We will select students based on their Year 12 results (60% weighting toward the ATAR selection rank) and uniTEST results (40%). Flinders will also consider applicants based on their uniTEST results (100%) as a standalone entry score (subject to SACE completion and any course prerequisites or specific admissions requirements). If you take the test and don't do well, we will only consider your highest selection rank.

flinders.edu.au/unitest

### If you haven't achieved the results you expected

If you haven't achieved the results you expected in Year 12, there are a number of pathways to your preferred degree. You can start studying one course and move to another via internal transfer or Flinderslink.

flinders.edu.au/study/pathways/flinderslink

## If you have work and life experience

## If you have some higher education

### **Foundation Studies**

The Foundation Studies program has been designed to introduce you to university study in a supportive learning environment. Open to people from all backgrounds, Foundation Studies provides a pathway to gain entry to most degrees at Flinders and offers guaranteed entry into some degrees.

flinders.edu.au/study/pathways/foundation-studies

### **Military Pathways**

Use your military service in the Australian Defence Force as a pathway to a Flinders University degree.

flinders.edu.au/study/pathways/military-veterans

### **Adult Entry**

The adult entry scheme enables people aged 18 years and over to apply to study at Flinders via the Special Tertiary Admissions Test (STAT). Applications are made via SATAC.

### www.satac.edu.au/stat

Alternatively, you may wish to consider an undergraduate certificate or diploma. These shorter courses allow you the opportunity to explore your interests and to progress to further study. Certificate courses are Commonwealth supported.

flinders.edu.au/pathways

### **Tertiary Transfer**

If you have completed at least one semester of full-time equivalent study at university, you may be able to transfer to study at Flinders University using your grade point average (GPA).

#### TAFElink

Flinders offers guaranteed entry to selected degrees for applicants who have completed a TAFE/VET certificate IV or higher-level qualification, as long as degree prerequisites are met.

flinders.edu.au/tafelink

### **TAFE SA Dual Offers**

Flinders University together with TAFE SA offer over 45 dual offer pathways in various disciplines.

## Student support

### Whatever you decide to study at Flinders, we're always here to help you succeed.

### **Careers & Employability Service**

The Careers and Employability Service helps give you the edge in your career. CareerHub, our online employment portal, offers personalised job opportunities, career planning, programs to help you broaden your skills and experience, access to employer events and career-related resources. Whatever you are studying, CareerHub can help you find your direction and start your career.

### flinders.edu.au/careers

### **Flinders Connect**

Flinders Connect can help with everything from enrolment and fees to exams and graduation. You can also access Flinders Connect for specialist services in admissions, careers and IT help. A range of support services is also available.

### flinders.edu.au/flindersconnect

### **Flinders Library**

Our extensive library is more than a book repository. We provide a range of services such as computing and printing, document delivery and one-on-one librarian appointments for assistance with search strategies and finding resources for your assignments.

### library.flinders.edu.au

### Flinders Living

Flinders is the only university in Adelaide that gives you the opportunity to live on campus, and both University Hall and Deirdre Jordan Village are located within the Bedford Park campus. The wide range of social, sporting and community activities also enhances the student experience at Flinders Living.

### flinders.edu.au/living

### Flinders University Student Association

The Flinders University Student Association (FUSA) continues a long tradition of active student involvement and represents the rights and interests of students. FUSA manages social events, non-sporting clubs and societies, and the student publication Empire Times, and helps with academic, administrative and welfare issues.

### fusa.edu.au

### **Health, Counselling and Disability Services**

Managing your health is important. We have facilities and services available to help you look after your physical and mental health.

### flinders.edu.au/hcd

### **Horizon Awards**

The Flinders Horizon Award program sits alongside your academic studies; it is an innovative program that provides further opportunities to develop your professional skills and gain new experiences and insights that will benefit you now and in your future career.

### flinders.edu.au/horizon

### **Transition to university**

Starting at university is a big step; let's make it easier. The Student Learning Centre provides a range of services from writing and mathematics support to assistance with study and time-management skills

### students.flinders.edu.au/study-support/slc

### Yunggorendi Student Engagement

Yunggorendi Student Engagement are committed to increasing Aboriginal and Torres Strait Islander student access, participation, retention and success at Flinders University. Providing a range of services and supports for Aboriginal and Torres Strait Islander students, our team of highly qualified staff is dedicated to supporting you throughout your student journey.

### flinders.edu.au/yunggorendi

## **Indigenous Admission Scheme**

The Indigenous Admission Scheme provides an alternative pathway for Aboriginal and Torres Strait Islander people, who may not have been able to gain entry to university by traditional means, with the opportunity to study at Flinders.

### Are you eligible?

To be eligible for the Indigenous Admission Scheme you must be an Aboriginal or Torres Strait Islander in accordance with the Commonwealth definition, which requires you to:

- be of Aboriginal or Torres Strait Islander descent, and
- · identify as an Aboriginal or Torres Strait Islander, and
- be accepted as an Aboriginal or Torres Strait Islander in the community in which you live or have lived. You may be currently studying Year 12 or be a non-school leaver.

### How to apply

- Apply for the course you want to study through the South Australian Tertiary Admissions Centre (SATAC). You will get an application number from SATAC that you will need for your Indigenous Admission application form.
- Complete the Indigenous Admission Scheme Application form online (flinders.edu.au/indigenousadmissions). If you are having trouble completing an online application, you can request a paper based application via ias@flinders.edu.au or call us on 08 8201 3033.
- An interview is part of the application process, but you will be notified about this.

### **Application and interview dates**

First round applications close late November and second round applications close early January for semester 1. For our midyear intake to a number of courses, applications close in June.

flinders.edu.au/indigenousadmissions



"I originally chose Flinders as they have one of the best facilities for future teachers and fantastic student engagement. Studying at Flinders has been a wonderful experience that has given me the opportunity to discover what I truly want into the future while also providing me with support in every way imaginable. Flinders and Yunggorendi have given me the opportunity to meet others with similar ambitions and goals as myself and find the benefit of an education in places I would never have thought to look. As a proud Indigenous woman, I want to use my degree to work in First Nation communities to help our young people make it through their high schooling experience and onto their own future aspirations."

### **Emilee Pyrke**

Bachelor of Arts, Conditional entry to Master of Teaching (Secondary)

## Study abroad/scholarships

Over 550 scholarships worth \$2 million in total - ranging from \$1,000 to \$45,000.

## Take your studies overseas

Why wait until you graduate to explore the world? Flinders' Learn Without Borders could see you studying overseas, gaining a unique perspective and immersing yourself in a different culture, language and lifestyle. Our global study programs are designed to allow students to take their Flinders study overseas and earn academic credit toward their Flinders program. With 70+ overseas partner universities, why wait until you graduate to see the world?

flinders.edu.au/learn-without-borders

## **Explore Flinders scholarships**

Flinders offers a generous range of scholarships for students in undergraduate courses. With over 550 available scholarships, including scholarships to students from low socio-economic backgrounds, students from rural and regional areas, and Aboriginal and Torres Strait Islander students, you may be eligible for support that will help you achieve your goals at university.

flinders.edu.au/scholarships

"I always knew I wanted to study overseas at some stage during my degree. A semester exchange gave me the chance to complete topics that weren't available in my home university and experience life in a city that is very different to my own. Having completed a semester overseas, I now have an edge over the countless other students that are completing the same degree as me and have formed memories that will always stay with me."

### **Annelise Smith**

Bachelor of Business (Advanced Leadership)

"The Wyndham Richardson Scholarship Fund has been invaluable to reduce the financial pressure during studies, especially now that I am in the later years of my degree."

### **Ryan Rowston**

**Bachelor of Computer Science** 

Wyndham Richardson Scholarship Fund recipient

## How to apply

## When can I start?

## Flinders offers two admissions cycles each year for undergraduate degrees.

### Check the application dates

 applicants need to apply through the South Australian Tertiary Admissions Centre (SATAC)

satac.edu.au

### Read the course information

- check the admission criteria
- check the prerequisites
- check assumed knowledge and additional admission criteria
- consider combined degrees
- · consider pathways to your degree

### Visit us

- attend Flinders Open Days
- · check other upcoming events at

events.flinders.edu.au

### Contact us if you have any questions

- call 1300 354 633 (local call cost)
- email askflinders@flinders.edu.au

### **Apply**

- apply through SATAC at satac.edu.au
- · apply for scholarships at flinders.edu.au/scholarships
- lodge separate Indigenous Admission Scheme (if applicable) at

### flinders.edu.au/indigenousadmissions

### **Accept your offer**

• enrol in your subject/topics at

students.flinders.edu.au/my-course/enrolment

### Semester 1 - March start

Applications open in August for commencement the following year.

### Semester 2\* - July start

Mid-year applications open in August for commencement in July the following year.

\* Not all degrees are offered for semester 2.

### **Kev dates**

Flinders Open Days: August 2021

Semester 1 2022 start date: 28 February 2022 Semester 1 Orientation week: 21 February 2022 Semester 2 2022 start date: 25 July 2022 Semester 2 Orientation week: 18 July 2022

### Fees and charges

### Your course fees - Commonwealth support

All our courses list indicative fees, but as an undergraduate student your course is Commonwealth supported provided you're an eligible Australian citizen, New Zealand citizen or permanent resident.

Your course being Commonwealth supported means that your course fees are shared between the Australian government and you – with your portion being the student contribution amount.

### **HECS-HELP** loan

You won't have to pay your fees up-front if you're an Australian citizen or holder of a permanent humanitarian visa. You can get a HECS-HELP loan for your student contribution portion of your uni fees. Find out more about costs to plan for while you're at uni at

flinders.edu.au/fees

## **Glossary**

There are many terms used within a university that may be unfamiliar or confusing. Below are a few terms that may need explanation.

### **Admission pathway**

Any one of the options available to a prospective higher education student that will enable them to meet the entry requirements of their chosen courses.

### **ATAR**

The Australian Tertiary Admission Rank (ATAR) is a ranking from 30 (lowest) to 99.95 (highest) agreed by COAG as a nationally equivalent measure of a person's relative academic ranking within their complete age cohort in the year they graduated from senior secondary school.

### **Adjustment factors**

Often referred to previously as 'bonus points', these are additional points that may be used in combination with an applicant's ATAR to derive a person's course selection rank.

### Defer

Delaying the start of a course of study by one year (commencing students only). If you have already enrolled, then you need to withdraw from topics before you can defer.

### **Guaranteed entry selection rank**

Achieve a selection rank equal to or above the published guaranteed entry selection rank and you'll be guaranteed a place at Flinders.

### Major

A sequence of topics required to be taken as defined in your course rule, normally across all years of a course.

### Minor

A sequence of topics required to be taken as defined in your course rule, generally as part of a major.

### Offer round/s

Refers to the series of dates on which offers of higher education places are issued to applicants throughout the year, whether through a tertiary admission centre or directly by a higher education provider.

### **Selection rank**

The ranking that tertiary admission centres and most universities actually use to assess admission to a course. A person's course selection rank can include their ATAR, any adjustments they are eligible for, such as equity or subject adjustments, other contributions calculated on the basis of work experience or previous non-secondary study, portfolio assessments, results of the Special Tertiary Admissions Test, other supplementary tests, etc.

## This is Flinders

Flinders' huge main campus features an award-winning hub and plaza, with retail, food outlets and a state-of-the-art sport and fitness centre. Take a virtual tour of Flinders University and explore our amazing locations. It's the next best thing to being here!

flinders.edu.au/vr

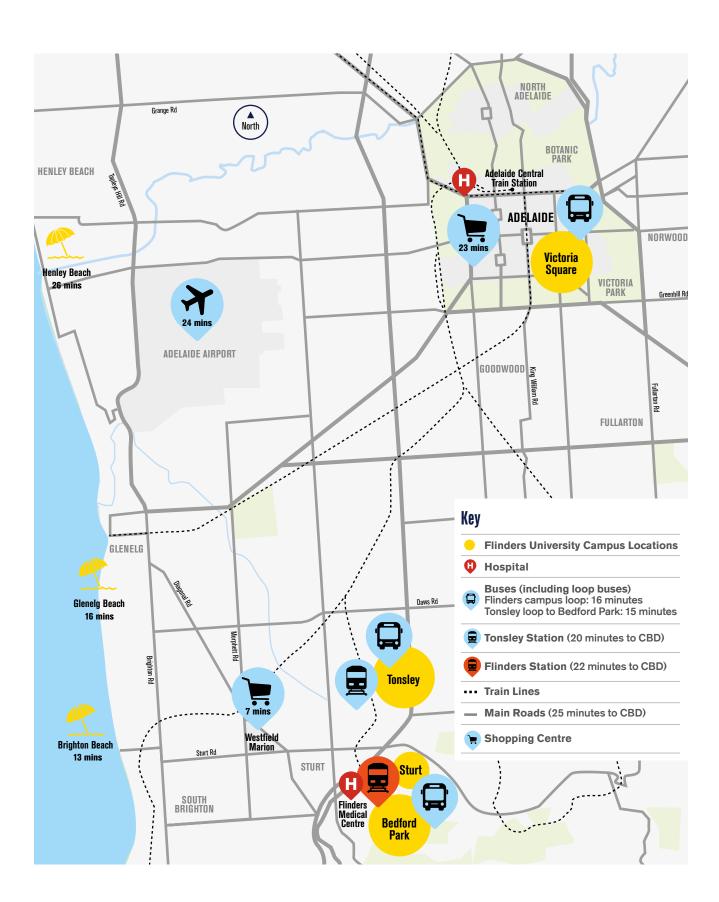
### The Flinders railway line is now open

The new Flinders train line has made travel easier and more convenient than ever, linking Bedford Park to our Tonsley campus and the Adelaide city centre, now just 22 minutes away.











### CONTACT US

Our friendly staff are available to answer your questions:

1300 354 633 (local call cost) | askflinders@flinders.edu.au | flinders.edu.au/ask

International students should contact:

+61 8 8201 2727 | flinders.edu.au/international | INTLAdmissions@flinders.edu.au

Every effort has been made to ensure the information in this brochure is accurate at the time of publication: July 2021. Flinders University reserves the right to alter any course or topic contained herein without prior notice. Alterations are reflected in the course information available on the University's website. CRICOS No. 00114A

