

Science



Chemistry | Environment | Palaeontology | Biotechnology | Animal Behaviour
Marine Biology | Forensics | Physics | Mathematics

[Flinders.edu.au](https://www.flinders.edu.au)

Explore science from its core...

to the outer limits

Pictured: PhD student Peter Reeve tests the water at Oaklands Wetland.

Flinders University acknowledges the Traditional Owners and Custodians of the lands on which its campuses are located. These are the Traditional Lands of the Arrernte, Dagoman, First Nations of the South East, First Peoples of the River Murray & Mallee region, Jawoyn, Kurna, Larrakia, Ngadjuri, Ngarrindjeri, Raminjjeri, Warumungu, Wardaman and Yolngu people. We honour their Elders past, present and emerging.

At Flinders, it's all about your scientific career

Our 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.



"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)

* Micro-X Ltd is an award winning ASX listed X-ray technology company

Environment degrees

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

Find out everything you need to know about studying environment at Flinders by scanning the QR code or visiting flinders.edu.au/study/environment



Scan to find out more

Bachelor of Geospatial Information Systems

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.

- Study at a university that leads Australia in implementing and teaching the latest geospatial technologies. Study a secondary area including archaeology, biology, geography and environmental studies.
- Gain practical experience and develop on-the-job use of a range of relevant digital technologies in our dedicated Spatial Information Systems Laboratory.
- Develop contacts and work skills through an industry placement in an environmental agency.

Bachelor of Geospatial Information Systems / Bachelor of Surveying at Flinders

Start your amazing journey to become a surveyor. Flinders University is the only South Australian University offering education that will enable graduates to qualify as registered surveyors in South Australia.

- You’ll be in demand with demand for surveyors and spatial scientists expected to increase; current estimates say surveying and geospatial completions need to increase 117.1% to 920 people per year to meet future demand over the next decade.*
- Gain practical experience and develop on-the-job use of a range of relevant digital technologies in our dedicated Spatial Information Systems Laboratory

* (Determining the Future Demand, Supply and Skills Gap for Surveying and Geospatial Professionals: 2022 - 2032 January 2023 report)

Bachelor of Science (Animal Behaviour)

Bachelor of Science (Honours) (Animal Behaviour)

Explore the behaviour of a broad range of animals. Learn how to collect, analyse and understand information relevant to animal behaviour and how to communicate this information to a variety of audiences.

- 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.
- 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.
- Our academics have close relationships with industry partners and government organisations, increasing employment opportunities.

Bachelor of Science (Biodiversity and Conservation)

Bachelor of Science (Honours) (Biodiversity and Conservation)

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.

- Learn the principles of reserve design, habitat restoration and other means of conserving species affected by human impacts.
- 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.

Bachelor of Science (Environmental Science)

Bachelor of Science (Honours) (Environmental Science)

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

- 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.

Bachelor of Science (Marine Biology)

Bachelor of Science (Honours) (Marine Biology)

In this degree, you will gain extensive knowledge in marine biodiversity, aquaculture, ecology, genetics, conservation, fisheries and related areas, and build transferable skills.

- Get a broad understanding of the biology of marine organisms, their relationships with the physico-chemical marine environment and their potential responses to changes.
- Study in our new state-of the-art Biodiversity Building and learn from internationally eminent marine biologists and oceanographers.
- Participate in marine-based fieldwork, including field trips to different marine bio-regions.

Science degrees

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.

Find out everything you need to know about studying science at Flinders by scanning the QR code or visiting flinders.edu.au/study/science



Scan to find out more

Bachelor of Arts and Science

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.

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.

- Your studies will focus on both pure and applied mathematics and statistics, and you can choose topics in other disciplines that use applied mathematics, such as medicine, business, physics and environmental science.
- Develop advanced research, communication and technical skills.
- Focus on advanced pure and applied mathematics in our Mathematical Sciences Laboratory.

Bachelor of Science

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.

- Follow your interests in core sciences from a diverse range of disciplines.
- Explore a specific area while getting a broad foundation in science by studying a major, or gain 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.

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.

- 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.

Bachelor of Science (Biotechnology)

Bachelor of Science (Honours) (Biotechnology)

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.

- Combine theory and specialised practical training in the life sciences with the study of related business, legal, ethical and social issues.
- 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.

Explore our science majors

Flinders gives you the flexibility to choose from major areas of study across the University’s wide range of science disciplines, including our new nuclear major for chemistry and physics students.



Scan to find
out more

Bachelor of Science (Chemical Sciences)

Bachelor of Science (Honours) (Chemical Sciences)

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.

- Learn how to understand and apply chemical principles to solve problems, master lab techniques and equipment, undertake chemistry research and communicate your findings.
- This degree provides you with practical experience that prepares you for the workplace through a professional placement in your final year.
- Have the opportunity to complete our new nuclear engineering major, offered through a partnership between Australia, the US and the UK.

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.

- 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.
- You'll be able to access research facilities among Australia's best and undertake research in the field.

Bachelor of Science (Palaeontology)

Bachelor of Science (Honours) (Palaeontology)

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.

- Study the first and only named palaeontology degree in Australasia.
- Learn in our purpose-built palaeontology laboratories.
- Study the key stages in the history of vertebrates, including the transition to living on land and how environmental changes have shaped the evolution of modern Australian fauna.

Bachelor of Science (Physics)

Bachelor of Science (Honours) (Physics)

Gain a solid foundation in physics and mathematics, and acquire extensive knowledge in the area.

- Learn to understand physics at a deeper level, apply scientific principles in a physics context and understand the role of physics in society.
- Retrieve and present information about physics in a scientific manner, including communicating effectively with a variety of audiences.
- Have the opportunity to complete our new nuclear engineering major, offered through a partnership between Australia, the US and the UK.

Bachelor of Science (Life Sciences)

Bachelor of Science (Honours) (Life Sciences)

This degree combines aspects of molecular biology, cell physiology and microbiology with new computational approaches to discover fundamental aspects of life.

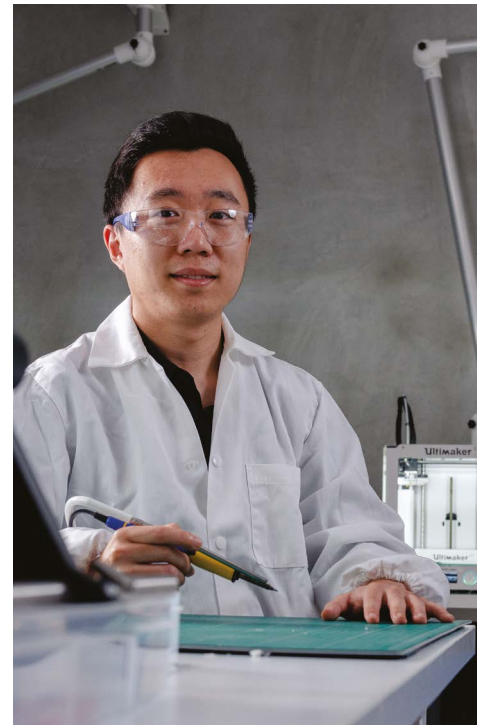
- Develop applied and job-ready skills through comprehensive laboratory practicals that are embedded in many of the topics.
- Explore areas of biotechnology, forensic science, plant science, environmental health and biomedical engineering.
- You will integrate big data processing skills that are translatable to many different fields, even outside of science.

Bachelor of Science (Plant Science)

Bachelor of Science (Honours) (Plant Science)

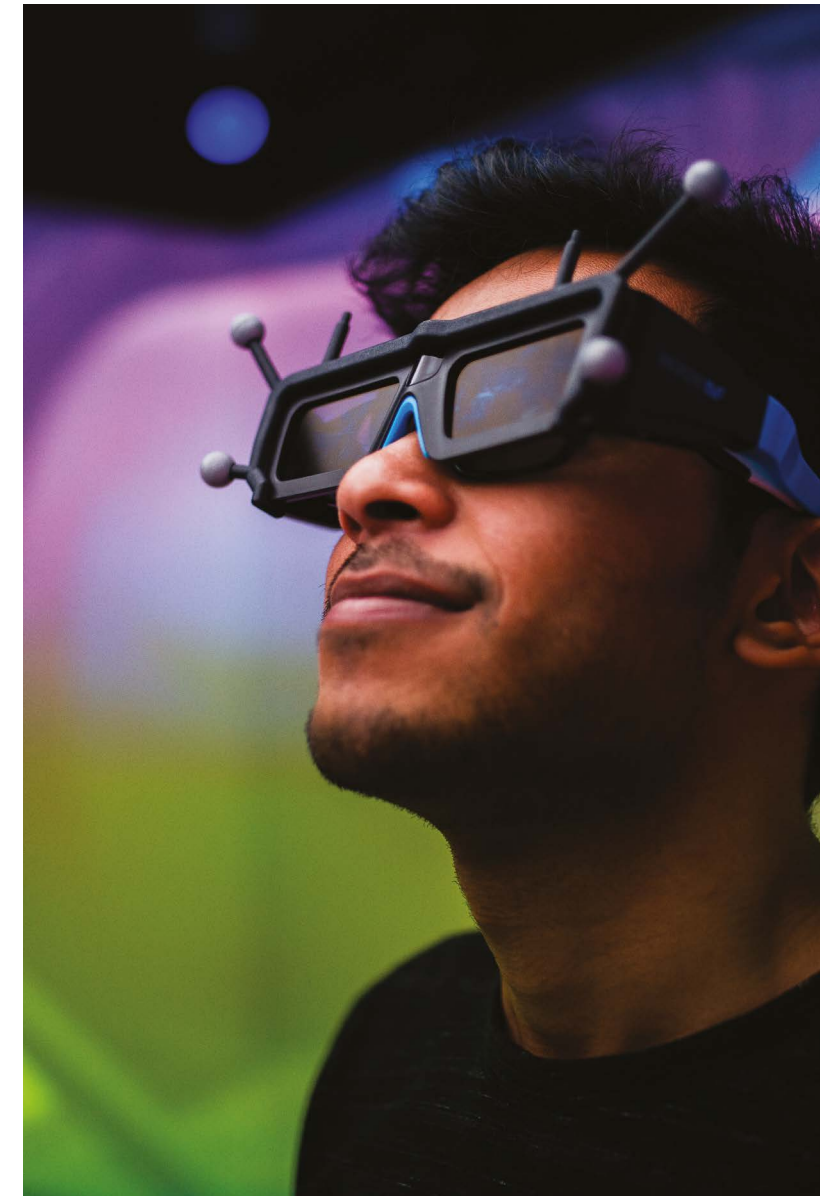
This degree will have you working with plants hands-on, including oceanic algae, life-supporting crops and our precious native flora.

- Learn about plants on a molecular level, right through to whole plant ecosystems whilst being surrounded by South Australia's unique botanical environment every day!
- Study in an environment that gives you the real lived experience of being a plant scientist.
- You'll graduate with employer-ready skills in plant physiology, molecular biology and ecology, preparing you for a career in agriculture, horticulture, biotechnology, environment and conservation.



Flinders at Tonsley

Tonsley embodies world's best practice in education, teaching and research. It's a place where innovation, collaboration and entrepreneurial spirit combine to create the products and processes of the twenty-first century and beyond.



With more than 150 staff and 2,000 students – and a 2,000 square metre pod for heavy engineering equipment – Tonsley is a place where Flinders University students interact with business and where business interacts with Flinders researchers in areas such as engineering, medical devices and nanoscale technologies.

Flinders at Tonsley centrally locates computer science, engineering and mathematics at Flinders University with the New Venture Institute, Medical Device Research Institute and Centre for Nanoscale Science and Technology, alongside some of Adelaide's biggest businesses and industries.

Tonsley is located centrally between Flinders University's Bedford Park campus and Adelaide city. It's connected to the city by train, offering convenient access 15 minutes from the city's CBD. And Tonsley is a five-minute car ride, a 20-minute ride on the Flinders loop bus or a 30-minute walk from the Bedford Park campus.

Tonsley is in touch with industry. Study alongside industry leaders and gain valuable career-ready skills.

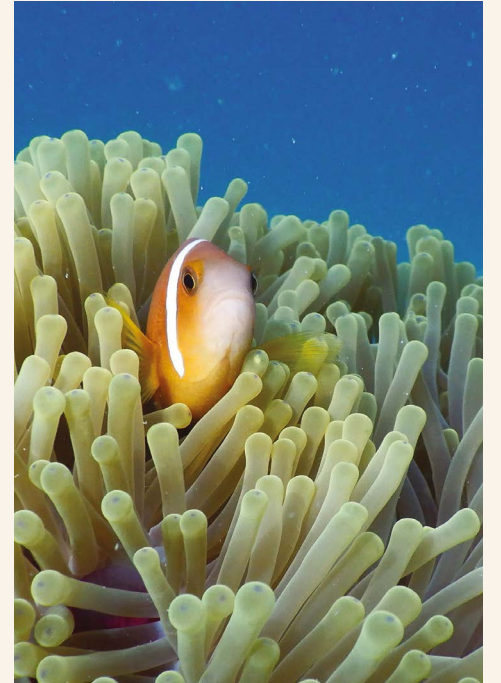
Sleepy lizard, *Tiliqua rugosa*
Photo by Gerrut Norval



The family-living gidgee skink, *Egernia stokesii*
Photo by Aaron Fenner



The Maldivian clownfish, *Amphiprion nigripes*
Photo by Cassie Hoepner



Nature Education and Research Facility



Embedded into a southern ridge of the Bedford Park campus is Flinders' Nature Education and Research Facility (NERF), a futuristic container construction keeping fish and lizards for conservation, educational and research purposes.

The NERF building supports ecology, molecular ecology, biodiversity and conservation, marine biology, aquaculture, microbiology and other specialist research fields – just to name a few!

Providing 'hands-on' teaching opportunities, the building facilitates enhanced research collaborations and outcomes, particularly in the areas of social and ecological research in animal behaviour.

Bedford Park



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.

Tonsley



Flinders at Tonsley is a place where our students interact with business, and where business interacts with our researchers in areas such as engineering, medical devices and nanoscale technologies.

Our campuses

Flinders’ Adelaide campuses include our main Bedford Park campus and Flinders at Tonsley, which features close links to industry. Our stunning new city campus is situated at Festival Plaza on North Terrace, right beside the Adelaide Railway Station.

Take a virtual tour of Flinders University and explore our amazing locations.



Getting to Flinders

Flinders is well connected to Adelaide by bus and train. The Flinders Railway Line gets you from our new city campus to Tonsley in a super-fast 20 minutes, or to Bedford Park in just 22 minutes.

Explore all our transport options.



Flinders University’s cutting-edge, vertical campus offers a new way of learning in the heart of the city. Flinders’ new city campus at Festival Plaza has been designed for flexibility, collaboration and immersion. Here, students will gain the knowledge and practical skills they need to confidently step into their careers.

Spanning eight levels, with multiple state-of-the-art teaching spaces, Flinders’ new city campus is designed for innovative and adaptable learning, catering to an extensive range of study programs. Every floor has dedicated spaces for students to come together, learn from industry experts and be inspired by a world of learning possibilities.



Flinders’ City Campus

Applying to study

How to apply

Applying to study at Flinders is easy, but there are some steps you'll need to follow. Applicants need to apply through the South Australian Tertiary Admissions Centre (SATAC).

You'll find application dates and details at:

satac.edu.au

Before you apply

Visit the course page you're interested in via the QR codes in this brochure, or via flinders.edu.au/study to make sure you have all the information and admission criteria you need, such as prerequisites and assumed knowledge.

You may also want to explore alternative pathways to your degree or combined degrees.

After you've applied

Once you've received an offer to a course, visit

students.flinders.edu.au/my-course/enrolment to enrol in your subject/topics.

Fees and charges

As an undergraduate student your course is Commonwealth supported provided you're an eligible Australian citizen, New Zealand citizen or permanent resident. This means that your course fees are shared between the Australian government and you. You may then choose to apply for a HECS-HELP loan to pay your student contribution amount. Find out more at:

flinders.edu.au/fees

If you have any questions

Feel free to contact us via phone, email or through a one-on-one appointment. We're always happy to help.

flinders.edu.au/study/contact-us

Starting at Flinders

When can I start?

Flinders offers two admissions cycles each year for undergraduate degrees. Semester 1 starts in March. If you've decided to take a break from schooling, you may decide to start mid-year in Semester 2, which starts in July. Note that not all degrees offer a Semester 2 start, so check the relevant course page via:

flinders.edu.au/study

Applications for both Semester 1 and Semester 2 open the previous August.

Key dates

Semester 1 Orientation week: 24 February 2025

Semester 1 2025 start date: 3 March 2025

Semester 2 Orientation week: 21 July 2025

Semester 2 2025 start date: 28 July 2025

Student support

Student support at Flinders starts from well before you apply. Our Flinders Support and Services Directory (students.flinders.edu.au/support) covers:

- health and wellbeing
- study and learning
- financial support and assistance
- enrolment and course support
- admin and technology
- careers and employment
- security
- Indigenous student support

Our support team is on hand to answer any questions you might have via phone, email or 1-on-1 sessions. If you have any questions, contact us via:

flinders.edu.au/study/contact-us

Flinders Living

Flinders is the only university in Adelaide that gives you the opportunity to live on campus.

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.edu.au

Yungkurinthe Student Engagement

Yungkurinthe Student Engagement provides a range of services and supports for Aboriginal and Torres Strait Islander students.

flinders.edu.au/study/indigenous-students

Glossary

There are many terms used within a university that may be unfamiliar or confusing. The link below contains a list of common university terminology.

students.flinders.edu.au/glossary

Flinders scholarships

Flinders offers a generous range of scholarships for students in undergraduate courses. With over 400 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

Work Integrated Learning

Flinders' Work Integrated Learning (WIL) will improve your employability by helping you better understand the day-to-day skills employers are looking for, and by giving you the chance to gain real experience in a workplace environment directly related to the course you're studying.

You might take on a work placement or internship, gain hands-on experience through field education, or get involved in projects with industry or community organisations.

flinders.edu.au/WIL

Combined degrees

Explore your interests and unlock more career opportunities by combining 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.

For a full list of combined degree options visit:

flinders.edu.au/combineddegrees

Admission Pathways

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.

flinders.edu.au/pathways

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.

flinders.edu.au/year12

Guaranteed entry

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

Year 12 Grades Entry Scheme

Upon SACE completion, by using three of your best Year 12 grades, you can gain a place in your course of choice. This is in addition to being considered on any other pathway for which you are eligible.

Indigenous Admission Scheme

The Indigenous Admission Scheme provides an alternative pathway for Aboriginal and Torres Strait Islander people. Visit:

flinders.edu.au/indigenousadmissions

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.

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

Science and environment degrees

For further information on entry requirements, pathways, career outcomes and more, scan the QR code or visit flinders.edu.au/study/science



Scan to find out more

Bachelor degrees	SATAC CODE (^ AT FESTIVAL PLAZA)	2024 SELECTION RANK	2024 GUARANTEED SELECTION RANK	YEARS FULL-TIME	DEFERRABLE	TAFELINK	PATHWAY DEGREES	ADDITIONAL ENTRY REQUIREMENTS
Arts & Science	234011	70	75	3	Yes	Dip or above	Arts (214031) Diploma in Arts (216031)	None
Geospatial Information Systems / Surveying	244981	75	80	4	Yes	Dip or above	Science (234511)	SACE Stage 2 (Year 12) General Mathematics or the equivalent.
Geospatial Information Systems	244721	70	75	3	Yes	Cert IV	Science (234511)	None
Mathematical Science	224631	70	75	3	Yes	Cert IV	Science (234511) Arts and Science (234011)	SACE stage two specialist mathematics or mathematical methods or equivalent
Mathematical Science (Honours)	224641	80	85	4	Yes	Dip or above	Mathematical Science (224631) Science (234511) Arts and Science (234011)	SACE stage two specialist mathematics or mathematical methods or equivalent
Science	234511	60	65	3	Yes	Cert IV	Speak to us about your options	None
Science (Animal Behaviour)	234211	70	75	3	Yes	Cert IV	Science (234511)	None
Science (Biodiversity and Conservation)	234221	70	75	3	Yes	Cert IV	Science (234511)	None
Science (Biotechnology)	234521	70	75	3	Yes	Cert IV	Science (234511)	None
Science (Chemical Sciences)	234231	70	75	3	Yes	Cert IV	Science (234511)	None
Science (Environmental Science)	234271	70	75	3	Yes	Cert IV	Science (234511)	None
Science (Forensic and Analytical Science)	234281	70	75	3	Yes	Cert IV	Science (Forensic and Analytical Science Pathway) (234171), Science (234511)	SACE stage two chemistry or equivalent.
Science (Forensic and Analytical Science Pathway)	234171	60	65	1	Yes	Cert IV	Science (234511)	None
Science (Honours) (Animal Behaviour)	234361	80	85	4	Yes	Dip or above	Science (Animal Behaviour) (234211), Science (234511)	None
Science (Honours) (Biodiversity and Conservation)	234371	80	85	4	Yes	Dip or above	Science (Biodiversity & Conservation) (234221), Science (234511)	None
Science (Honours) (Biotechnology)	234541	80	85	4	Yes	Dip or above	Science (Biotechnology) (234521), Science (234511)	None
Science (Honours) (Chemical Sciences)	234381	80	85	4	Yes	Dip or above	Science (Chemical Sciences) (234381), Science (234511)	None
Science (Honours) (Enhanced Program for High Achievers)	214721	95	95	4	Yes	Adv Dip or above	Any science honours specialisations, Science (234511)	None
Science (Honours) (Environmental Science)	234421	80	85	4	Yes	Dip or above	Science (Environmental Science) (234271), Science (234511) Diploma in Arts (216031)	None
Science (Honours) (Forensic and Analytical Science)	234431	80	85	4	Yes	Dip or above	Science (Forensic & Analytical Science) (234281), Science (Forensic and Analytical Science Pathway) (234171), Science (234511)	SACE stage two chemistry or equivalent
Science (Honours) (Life Sciences)	244791	80	85	4	Yes	Dip or above	Science (Life Sciences) (244661), Science (234511)	None
Science (Honours) (Marine Biology)	234451	80	85	4	Yes	Dip or above	Science (Marine Biology) (234451), Science (234511)	None
Science (Honours) (Palaeontology)	224051	80	85	4	Yes	Dip or above	Science (Palaeontology) (224051), Science (234511)	None
Science (Honours) (Physics)	234491	80	85	4	Yes	Dip or above	Science (Physics) (234341), Science (234511)	Knowledge of SACE stage two mathematical methods and physics or equivalent is assumed.
Science (Honours) (Plant Science)	244801	80	85	4	Yes	Cert IV	Science (Biodiversity & Conservation) (234221), Science (234511)	None
Science (Life Sciences)	244661	70	75	3	Yes	Cert IV	Science (234511)	None
Science (Marine Biology)	234301	70	75	3	Yes	Cert IV	Science (234511)	None
Science (Palaeontology)	224061	70	75	3	Yes	Cert IV	Science (234511)	None
Science (Physics)	234341	70	75	3	Yes	Cert IV	Science (234511)	Knowledge of SACE stage two mathematical methods and physics or equivalent is assumed.
Science (Plant Science)	244681	70	75	3	Yes	Cert IV	Science (234511)	None

Science

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: May 2024. 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