## Engineering

<table>
<thead>
<tr>
<th>Engineering</th>
<th>Starting at Flinders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design &amp; Technology Innovation</td>
<td>Combined degrees</td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td>Finders diplomas</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Pathways to study</td>
</tr>
<tr>
<td>Electrical and Electronic Engineering</td>
<td>Student support</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>Indigenous Admission Scheme</td>
</tr>
<tr>
<td>Maritime Engineering</td>
<td>Overseas studies &amp; scholarships</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Key dates</td>
</tr>
<tr>
<td>Robotics Engineering</td>
<td>How to apply</td>
</tr>
<tr>
<td>Engineering Science</td>
<td>Fees &amp; charges</td>
</tr>
<tr>
<td>Software Engineering</td>
<td>Glossary</td>
</tr>
<tr>
<td>Engineering Technology (Electronic Systems &amp; Security)</td>
<td>Location &amp; map</td>
</tr>
<tr>
<td>Mathematical Sciences</td>
<td></td>
</tr>
<tr>
<td>Engineering pathways</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
</tr>
</tbody>
</table>

Flinders University acknowledges the Traditional Owners and Custodians of the lands on which its campuses are located, spanning across South Australia and the Northern Territory. We honour their Elders and Custodians past, present and emerging. We recognise the three largest Flinders University campuses across South Australia and Northern Territory are located on the lands of the Kaurna (Bedford Park, SA), Arrernte (Alice Springs, NT) and Larrakia (Darwin, NT) Nations.
At Flinders, it’s all about your global career

Choose your degree
Flinders University offers a range of future-focused degrees that will allow you to follow your interest across areas such as engineering, computer science, information technology and defence. 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 leaders
Flinders’ Engineering, Defence, Computer Science & Information Technology degrees are taught by highly-qualified academics who are active in their respective fields and have the practical skills and industry networks to ensure that you graduate more than ready for the next step in your career path.

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.

“Engineering is such an exciting field because it’s always changing and evolving, which means that the problems we’re faced with today will be completely different in a decade’s time. This degree has equipped me with the skills I need for a strong start in the field I’m pursuing, in both technical and professional aspects.”

An Lam
Graduate, Bachelor of Engineering (Mechanical) (Honours)/Master of Engineering (Biomedical)
Make a difference to the world around you.
Engineers build the future, and Flinders Engineering could help you become one of them.

The career of your dreams
Engineers are in high demand worldwide. Demand for electrical engineers is increasing. The world of robotics is changing rapidly, and large-scale civil engineering projects are being conducted in many areas. From robotics to renewable energy, shipbuilding and defence, civil engineering or creating new medical technologies... Flinders Engineering graduates are working in a broad range of engineering fields across the globe. You can help design and build tomorrow.

Graduate ready for success
Flinders Engineering degrees are offered in close collaboration with industry. You'll be plugged into our $120 million hub of innovation and entrepreneurship at Tonsley, studying alongside some of Adelaide's biggest businesses and globally recognised organisations such as SAGE, Siemens, SIMEC ZEN Energy, Tesla, Micro-X and Rockwell Automation. Graduate career-ready and ready to take on the world.

Up to 18 months with industry
Flinders Engineering's Work Integrated Learning (WIL) program is South Australia's longest industry placement. All Flinders Engineering students have the opportunity to undertake a 20-week industry placement as part of their degree, helping them graduate work-ready. Honours students complete a research placement enabling them to work alongside professional engineers, tackling real-world problems, for up to 18 months in total.

SA's longest engineering placement**

** Public SA-founded universities only
Innovation is at the heart of Flinders Engineering

Flinders is a supporting partner of the Bridgestone World Solar Challenge, held biennially since 1987.

The Flinders Automotive Solar Team (FAST) involves engineering students and staff who design and build a competitive solar car at our Tonsley campus that is capable of taking on the challenge of driving 3,000 kilometres from Darwin to Adelaide. Competing with teams from across the globe, the FAST car is an amazing example of the ingenuity and innovation inherent in Flinders’ engineering programs.
Bachelor of Design and Technology Innovation

Graduate prepared to solve problems and create commercial solutions. This degree prepares you to do this by developing a sound understanding of three areas: design; innovation management; and science, technology and engineering. You’ll be taught desirable skills that will allow you to design and develop new products or services to solve a range of real-world problems.

Health care is a large and rapidly growing industry, and your skills could help improve the way we plan, design, manufacture and maintain healthcare systems and equipment. You will gain a solid education in both engineering and medical science, along with important practical skills and the ability to work as part of an effective team that will see you graduate work-ready.

SATAC code 224771
Prerequisites None
Assumed knowledge None
2022 selection rank 70.00
Guaranteed entry selection rank 75.00
TAFElink Cert IV or above
Adjustment factors Yes

Gain an understanding of industrial design, technology and innovation in one degree and learn to match a problem with technology to create a commercial solution.

Enhance your employability with highly attractive, vital skills in the rapidly changing innovation sector.

Gain practical, hands-on exposure to the cutting-edge equipment and facilities of Flinders University’s new technology precinct at Tonsley.

You’ll have the chance to participate in a 12-week industry work-integrated placement.

This degree is recognised by the Design Institute of Australia.

There are opportunities to take your studies overseas with a 12-week practical work experience placement in Europe, Asia or North America.

Career opportunities

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

• product designer
• business development manager
• commercialisation specialist
• graduate consultant
• innovation strategist.

Potential employers include:

• CSR Limited
• CSIRO
• Department of Industry, Innovation and Science
• Clipsal
• Adidas.

Bachelor of Engineering (Biomedical) (Honours)

SATAC code 224781
Prerequisites Yes*
Assumed knowledge Yes**
2022 selection rank 75.00
Guaranteed entry selection rank 80.00
TAFElink Dip or above
Adjustment factors Yes

* SACE stage two specialist mathematics, mathematical methods or equivalent.

** Knowledge of SACE stage two physics or equivalent is assumed.

You’ll study unique topics such as rehabilitation and assistive technology.

Flinders biomedical and materials engineering research is world class, and graduates have won Monash Scholarships, Fulbright Scholarships, Churchill Fellowships and Menzies Scholarships.

Choose a specialisation in mechanics-based or electronics-based biomedical engineering.

Our on-campus Medical Device Research Institute and Medical Device Partnering Program bring together some of the leading minds in biomedical engineering and related disciplines.

Through our extensive industry links, undertake a 20-week industry placement program of structured work experience with a local, national or international organisation.

This degree is fully accredited by Engineers Australia at the level of professional engineer and recognised internationally under the Washington Accord.

Career opportunities

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

• biomedical engineer
• clinical support specialist consultant
• customer support engineer
• pathology field service engineer
• instrumentation engineer.

Potential employers include:

• Chemtronics Biomedical Engineering
• Epworth HealthCare
• Bio-Rad Laboratories Pty Ltd
• Brainlab
• The Queen Elizabeth Hospital.
Bachelor of Engineering (Biomedical) (Honours)/Master of Engineering (Biomedical)

Health care is a large and rapidly growing industry, and your skills could help improve the way we plan, design, manufacture and maintain healthcare systems and equipment. You will gain a solid education in both engineering and medical science, along with important practical skills and the ability to work as part of an effective team that will see you graduate work-ready.

SATAC code: 224861

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th>Yes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumed knowledge</td>
<td>Yes**</td>
</tr>
<tr>
<td>2022 selection rank</td>
<td>95.00</td>
</tr>
<tr>
<td>Guaranteed entry selection rank</td>
<td>95.00</td>
</tr>
<tr>
<td>TAFElink</td>
<td>NA</td>
</tr>
<tr>
<td>Adjustment factors</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* SACE stage two specialist mathematics, mathematical methods or equivalent.
** Knowledge of SACE stage two physics or equivalent is assumed.

You’ll study unique topics such as rehabilitation and assistive technology.
Flinders biomedical and materials engineering research is world class, and graduates have won Monash Scholarships, Fulbright Scholarships, Churchill Fellowships and Menzies Scholarships.
Choose a specialisation in mechanics-based or electronics-based biomedical engineering.
Our on-campus Medical Device Research Institute and Medical Device Partnering Program bring together some of the leading minds in biomedical engineering and related disciplines.
Through our extensive industry links, undertake a 20-week industry placement program of structured work experience with a local, national or international organisation.
This degree is fully accredited by Engineers Australia at the level of professional engineer and recognised internationally under the Washington Accord.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- biomedical engineer
- clinical support specialist consultant
- customer support engineer
- pathology field service engineer
- instrumentation engineer.

Potential employers include:
- Chemtronics Biomedical Engineering
- Epworth HealthCare
- Bio-Rad Laboratories Pty Ltd
- Brainlab
- The Queen Elizabeth Hospital.

“Our students have a really close working relationship with our academics. From the day you join Flinders Engineering, you’ll have one-on-one support. You’ll work with an academic who will mentor you right throughout your studies. So there’s always someone with you to help you make the most of your journey.”

Dr Sherry Randhawa
Senior Lecturer
College of Science and Engineering
Bachelor of Engineering (Civil) (Honours)

Prepare yourself for a career solving civil engineering problems. You’ll learn how to create innovative solutions that consider social, economic and environmental concerns. This degree covers the four main civil engineering themes of structures, transport, water and geomechanics, then applies them to infrastructure design and construction.

SATAC code 224791
Prerequisites Yes*
Assumed knowledge Yes**
2022 selection rank 75.00
Guaranteed entry selection rank 80.00
TAFElink Dip or above
Adjustment factors Yes

* SACE stage two specialist mathematics, mathematical methods or equivalent.
** Knowledge of SACE stage two physics or equivalent is assumed.

Choose from a range of majors that allow you to follow your interests and graduate ready to take on the world. Flinders Bachelor of Engineering (Civil) (Honours) allows you to select a major in any of the following areas:

Civil infrastructure
This is a broad major that focuses on all aspects of civil engineering covering structural engineering, transport systems, geotechnical engineering and water engineering in depth.

Environmental engineering
Explore the environmental and sustainability aspects of civil engineering. On top of the solid civil engineering core you will study topics such as sustainable engineering, waste management and hydrochemistry.

Structural engineering
Study the development of civil engineered structures. To expand on your core civil engineering studies, you will also focus on concrete analysis and design, foundation design, and fatigue and fracture analysis.

Transport systems engineering
This major focuses on the development of transport solutions in civil engineering. Career focused and industry informed, topics will include transport planning, modelling and remote sensing.

- Learn to plan, design, build and maintain buildings, infrastructure and resources. Learn in purpose-built civil engineering labs and facilities in the new technology precinct at Tonsley.
- This degree has been designed in close collaboration with industry to meet future development needs in civil engineering.
- A degree in civil engineering allows for pathways into design, consulting, construction and project management. These are all jobs in ongoing high-demand areas.
- Nationally recognised integrated work placement with a local, national or international organisation gives you practical industry experience.
- There are opportunities to take your studies overseas with a student exchange program.
- This degree is fully accredited by Engineers Australia at the level of professional engineer and recognised internationally under the Washington Accord.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- stormwater design engineer
- site engineer
- structural design engineer
- geotechnical engineer
- transport systems engineer.

Potential employers include:
- Arup
- Lendlease
- Australian Rail Track Corporation
- City of Marion Council.
Bachelor of Engineering (Electrical and Electronic) (Honours)

Be a part of the next generation of electrical and electronic technology. Electrical engineering is concerned with large-scale electrical systems including renewable power generation and electric motors. Electronic engineering focuses on lower voltage systems such as computer systems, communication networks and integrated circuits.

SATAC code 244431

Prerequisites Yes*

Assumed knowledge Yes**

2022 selection rank 75.00

Guaranteed entry selection rank 80.00

TAFElink Dip or above

Adjustment factors Yes

* SACE stage two specialist mathematics, mathematical methods or equivalent.
** Knowledge of SACE stage two physics or equivalent is assumed.

Majors

Choose from a range of majors that allow you to follow your interests and graduate ready to take on the world. Flinders Bachelor of Engineering (Electrical and Electronic) (Honours) allows you to select a major in any of the following areas:

Advanced electrical engineering

This major focuses on electrical engineering and includes study in electrical energy systems including high voltage electrical power and renewable energy.

Advanced electronic engineering

Supplementing your core studies, this major focuses on the use of electronics as a component of computers, communications technology and control systems.

Computer and network systems

Study the application of electrical and electronic technology to create computer systems and networked devices.

Electronic systems and security

Take your studies to the cutting edge. This major focuses on the electromagnetic spectrum and the way in which electronics can be used to assure electromagnetic security.

New in 2022

Bachelor of Engineering (Electrical and Electronic) (Honours), Master of Engineering (Mechanical)

SATAC CODE 244571

Many companies want engineers that combine the skills of electrical and electronic engineers with those of mechanical engineers. This degree combination, unique in South Australia, is accredited at the professional level and brings together the advantages of both degrees.

Career opportunities

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

- computer systems engineer
- electrical power engineer
- electronic engineer
- security systems engineer
- telecommunications engineer.

Potential employers include:

- computer and telecommunications companies
- construction companies
- defence industry
- government and universities
- manufacturing
- mining and resources industry.

For more information visit: flinders.edu.au/engineering
Bachelor of Engineering (Environmental) (Honours)

Environmental engineering is where advances in science and technology are transformed into practical solutions that will protect and improve the quality of our environment. Environmental engineers are problem-solvers who design solutions to a range of hazards from airborne and waterborne diseases, water and air pollution, wastewater management and recycling. They implement environmental engineering law and assess the environmental impact of proposed projects.

Prepare to become a professional engineer in the maritime engineering industry. You’ll learn to design and manage the building of maritime vehicles, coastal engineering projects, port and harbour facilities, and offshore oil and gas installations. You’ll develop practical skills in mechanics and structures, ship design, hydrostatics and fluid mechanics, thermodynamics and energy engineering.

New in 2022

Bachelor of Engineering (Environmental) (Honours), Master of Engineering (Civil)

SATAC CODE 244561

Combine the advantages of being an in-demand environmental engineer with the knowledge needed to become an accredited civil engineer. Develop practical solutions that will protect and improve the quality of our environment, and create innovative infrastructure design and construction solutions across the four main civil engineering themes of structures, transport, water and geomechanics.
Bachelor of Engineering (Mechanical) (Honours)

Build a hands-on career with real-world applications. Learn to design, construct and operate mechanical systems. This degree encourages you to push the boundaries, preparing you for the future of mechanical systems engineering. You'll learn to apply the principles of physics, materials science and mathematics, and build depth of knowledge in materials, mechanics, design, thermodynamics and fluid mechanics.

Majors

Choose from a range of majors that allow you to follow your interests and graduate ready to take on the world.

Flinders' Bachelor of Engineering (Mechanical) (Honours) allows you to select a major in any of the following areas:

Mechanical engineering
This major provides a broad focus on all aspects of mechanical engineering, with topics including solid mechanics, mechanics of machines, fluid mechanics and thermodynamics, mechanical design, control systems, manufacturing and mechanics of materials.

Electro-mechanical systems
In many industrial sectors, mechanical engineers with a great understanding of electrical engineering principles are ideally preferred. This major uniquely provides a secondary course of study in electrical engineering on top of the core mechanical engineering topics. As well as the mechanical engineering topics, you would also cover electrical engineering principles, electrical machines, electrical energy and power systems.

Materials engineering
The development and engineering of materials enable mechanical engineers to design and manufacture products and devices with the best possible performance in service. This major focuses on the use of materials in mechanical systems. As well as the mechanical engineering topics, you would also study areas such as materials structure and characterisation, materials selection and failure analysis.

Maritime engineering
This major focuses on the use of mechanical systems in a maritime context. Taking this major will not only provide a comprehensive mechanical degree but also cover topics such as shipbuilding and hydrostatics. Students taking this major can transfer to the University of Tasmania at the end of year two to complete a specialised maritime engineering degree.

SATAC code
224831

Prerequisites
Yes*

Assumed knowledge
Yes**

2022 selection rank
75.00

Guaranteed entry selection rank
80.00

TAFE link
Dip or above

Adjustment factors
Yes

* SACE stage two specialist mathematics, mathematical methods or equivalent.
** Knowledge of SACE stage two physics or equivalent is assumed.

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

• graduate mechanical engineer
• graduate project engineer (mechanical)
• process development engineer/scientist
• mechanical design engineer
• graduate production engineer.

Potential employers include:

• BAE Systems
• Carl Zeiss
• Air Change Australia
• Woodside Energy
• Airservices Australia.

For more information visit: flinders.edu.au/engineering
“I never saw myself as someone that was technically minded. It was all the practical components that came with my degree that got me to really love it. I would highly recommend Flinders and studying engineering at Flinders because of the facilities and the community feel. The lecturers are very passionate and they are more than happy to have a chat if you have something you want to talk about. So, you can actually get involved in real research and you can start building your career before you even graduate.”

**Anika Talukdar**

Graduate, Bachelor of Engineering (Mechanical) (Honours)/Master of Engineering (Biomedical)
Bachelor of Engineering (Mechanical) (Honours)/Master of Engineering (Biomedical)

If you’re a high-achieving student, take a pathway that allows you to complete a program of study in mechanical and biomedical engineering in only five years. You could work towards a career in many areas in the mining, defence, manufacturing, shipbuilding, environmental, engineering consulting, building services, automotive and petrochemical industries, or in the design and production of diagnostic and therapeutic medical equipment in hospitals, devices to assist in home-based health care and rehabilitation, and sensory and control systems.

SATAC code 224871
Prerequisites Yes*
Assumed knowledge Yes**
2022 selection rank 95.00
Guaranteed entry selection rank 95.00
TAFElink NA
Adjustment factors Yes

* SACE stage two specialist mathematics, mathematical methods or equivalent.
** Knowledge of SACE stage two physics or equivalent is assumed.

You’ll have access to purpose-built, state-of-the-art teaching and laboratory facilities and heavy engineering pods at Tonsley.
You’ll study a variety of areas including dynamics, engineering design, biomechanics and biomedical instrumentation.
Put your mechanical engineering skills to the test in a range of national competitions like the Solar Car Challenge and Weir Warman Design Competition.
Become involved in Formula SAE, UAV and Mini Maker Faire.
Undertake a 20-week industry placement program of structured work experience with a local, national or international organisation.
There are opportunities to take your studies overseas with a student exchange program.
This degree is fully accredited by Engineers Australia at the level of professional engineer and recognised internationally under the Washington Accord.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- biomedical engineer
- clinical support specialist consultant
- customer support engineer
- pathology field service engineer
- instrumentation engineer.

Potential employers include:
- Chemtronics Biomedical Engineering
- Epworth HealthCare
- Bio-Rad Laboratories Pty Ltd
- Brainlab
- The Queen Elizabeth Hospital.

For more information visit: flinders.edu.au/engineering
“My robotics engineering degree taught me how to problem solve, think critically and work smart, not hard, which has prepared me for the reality of the workplace and allows me to work in teams effectively. Studying at Flinders University enabled a pathway for me to work in research, and I am now working in an amazing robotics position in research collaboration with industry partner BAE Systems Maritime Australia.”

Konstantinos (Kosta) Manning
Graduate, Bachelor of Engineering (Robotics) (Honours)
Bachelor of Engineering (Robotics) (Honours)

Changes to the way our workforce operates are opening up career opportunities in fields like robotics. This degree will see you graduate with the latest learning in robotics technologies, preparing you to become a key player in developing the robots that will populate our future. The degree combines electronics, computer control, signal processing and programming in the design, development and application of robots and their integration with other systems in the work environment.

SATAC code 224841
Prerequisites Yes*
Assumed knowledge Yes**
2022 selection rank 76.00
Guaranteed entry selection rank 80.00
TAFElink Dip or above
Adjustment factors Yes

* SACE stage two specialist mathematics, mathematical methods or equivalent.
** Knowledge of SACE stage two physics or equivalent is assumed.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- industrial engineer
- instrumentation engineer
- manufacturing engineer
- mechatronics specialist
- process and automation engineer scientist.

Potential employers include:
- Lockheed Martin
- Smart Automation Systems
- Monadelphous
- Simavita
- Rocket Lab.

Bachelor of Engineering (Robotics) (Honours)/Master of Engineering (Electrical and Electronic)

Create a career designing the robot workforce of the future. This degree will see you graduate with the latest learning in robotics technologies, preparing you to become a key player in developing the robots that will populate our future.

SATAC code 244451
Prerequisites Yes*
Assumed knowledge Yes**
2022 selection rank 95.00
Guaranteed entry selection rank 95.00
TAFElink NA
Adjustment factors Yes

* SACE stage two specialist mathematics, mathematical methods or equivalent.
** Knowledge of SACE stage two physics or equivalent is assumed.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- robotics engineer
- robotics sensor integration specialist
- mechatronic engineer
- process and automation engineer
- instrument engineer.

Potential employers include:
- Lockheed Martin
- Smart Automation Systems
- Monadelphous
- Simavita
- Rocket Lab.
- Airservices Australia.

For more information visit: flinders.edu.au/engineering
Bachelor of Engineering Science

Develop the practical skills you'll need for a rewarding career and graduate work-ready. In this degree, you'll gain the foundations for further study in engineering or for a career in an engineering-related field. The degree offers specialisations in biomedical engineering, civil engineering, electrical and electronic engineering, mechanical engineering, software engineering, and design and technology.

SATAC code 214811
Prerequisites None
Assumed knowledge None
2022 selection rank 60.00
Guaranteed entry selection rank 70.00
TAFElink Cert IV or above
Adjustment factors Yes

- You’ll learn the fundamental science that underpins engineering and how to apply those principles in practice.
- You can choose a specialisation in biomedical, civil, electrical and electronic, mechanical or software engineering.
- The degree provides a pathway to a four-year accredited Bachelor of Engineering in an engineering field of your choice.
- There are no prerequisites or assumed knowledge, you just need an enquiring mind.
- The degree provides additional topics and support for students who do not have a background of Year 12 mathematics and physics.
- You’ll have access to purpose-built, state-of-the-art teaching and laboratory facilities at Tonsley.
- You’ll undertake an engineering project or industry placement.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- construction materials technician
- graduate consultant
- laboratory assistant
- graduate process improver.

Potential employers include:
- Defence Science & Technology Group
- Safe Environments Pty Ltd
- CSIRO
- Department of Industry, Innovation and Science
- Agilent Technologies.

Bachelor of Engineering (Software) (Honours)

Widen your career opportunities with this future-oriented course, enabling you to choose a course of study with either an electronics or computer science focus. This degree provides you with a solid foundation in the technical and professional skills and knowledge required to pursue a successful career in the software industry.

SATAC code 224851
Prerequisites Yes*
Assumed knowledge Yes**
2022 selection rank 75.00
Guaranteed entry selection rank 80.00
TAFElink Dip or above
Adjustment factors Yes

* SACE stage two specialist mathematics, mathematical methods or equivalent.
** Knowledge of SACE stage two physics or equivalent is assumed.

- The degree has been specifically created for students looking to work as professional software engineers.
- You’ll have access to purpose-built, state-of-the-art teaching and laboratory facilities at Tonsley.
- Through our extensive industry links, undertake a 20-week industry placement program of structured work experience with a local, national or international organisation.
- Develop practical skills in programming, testing, network engineering, operating systems, design and automation, and signals and systems.
- There are opportunities to take your studies overseas as part of your industry placement.
- This degree is fully accredited by Engineers Australia at the level of professional engineer and recognised internationally under the Washington Accord.
- This course is also accredited by the Australian Computer Society at the professional level.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- engineering software developer
- graduate Linux developer
- Java developer
- platforms engineer
- graduate technical analyst.

Potential employers include:
- BAE Systems Australia
- Unico
- CSC
- Australian National Audit Office
- Lockheed Martin.
Bachelor of Engineering Technology (Electronic Systems and Security)

Developed in collaboration with the Defence Science and Technology Group within the Department of Defence, this course encompasses a wide range of communication mediums including radar, radio and microwaves. A particular focus will be placed on technologies that adopt these in conjunction with studies in signal processing, infrared imaging systems, multi-spectral sensing, satellite communications, computer networks and telecommunications.

SATAC code 244411
Prerequisites Yes*
Assumed knowledge None
2022 selection rank 70.00
Guaranteed entry selection rank 80.00
TAFElink Dip or above
Adjustment factors Yes

* SACE stage two general mathematics or equivalent.

- Unique in Australia for making graduates future-ready and prepared to tackle the most challenging security problems facing Australia.
- Generous scholarships available for high-achieving students.
- Includes placements and projects in collaboration with the government and defence industry but with applicability well beyond defence.
- Developed in collaboration with the Defence Science and Technology Group within the Department of Defence.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- defence research scientist/engineer
- electronic engineer
- electronic security specialist
- information analyst
- physicist
- telecommunications engineer.

Potential employers include:
- Department of Defence and other arms of government
- defence industry
- computer and telecommunications industry
- information research and advisory organisations
- cybersecurity firms.

Note that some options within the award, such as project and practicum placement within defence organisations, may be subject to security clearance. For this reason, this award is not available to international students.

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

Paired with the Bachelor of Science (Physics), the Bachelor of Engineering Technology (Electronic Systems and Security) has been designed to develop future-ready graduates to help government, industry and academia tackle the most challenging security problems facing Australia.

It encompasses developing the requisite knowledge, skills and real-world experience in the exploitation of the electromagnetic spectrum and provides a pathway to a highly paid and enduring career at the forefront of electronic and electromagnetic technologies.

SATAC code 244421
Prerequisites Yes*
Assumed knowledge None
2022 selection rank 70.00
Guaranteed entry selection rank N/A
TAFElink Dip or above
Adjustment factors Yes

* SACE stage two general mathematics or equivalent.

- Unique in Australia for making graduates future-ready and prepared to tackle the most challenging security problems facing Australia.
- Obtain two degrees in four years of full-time study.
- Generous scholarships are available for high-achieving students.
- Includes placements and projects in collaboration with the government and defence industry but with applicability well beyond defence.
- Articulates to the Bachelor of Engineering (Electrical and Electronic) (Honours) and the Bachelor of Science (Physics) (Honours).
- Developed in collaboration with the Defence Science and Technology Group within the Department of Defence.

Career opportunities
Your degree could open up a range of employment opportunities, including:
- defence research scientist/engineer
- electronic engineer
- electronic security specialist
- information analyst
- physicist
- telecommunications engineer.

Potential employers include:
- Department of Defence and other arms of government
- defence industry
- computer and telecommunications industry
- information research and advisory organisations
- cybersecurity firms.

Scholarships available
Flinders University in collaboration with Defence Science and Technology are excited to offer scholarships for high performing Australian students who enrol in the combined Bachelor of Engineering Technology (Electronic Systems and Security), Bachelor of Science (Physics) course, so apply to SATAC now.
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
2022 selection rank 70.00
2022 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) Dip or above
Adjustment factors Yes*

* SACE stage two specialist mathematics or mathematical methods or equivalent.

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
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.
There’s more than one way to get into an engineering degree at Flinders

At Flinders, there are multiple entry pathways you can study to become an accredited engineer, even if you:

- have minimal maths and physics background
- don’t know what area of engineering you want to specialise in
- have a lower ATAR than you had hoped for
- finished school some years back.

Flinders’ engineering courses have a common first year which enables you to get a taste of engineering disciplines and delay your choice of specialisation until you have experienced engineering as a whole, or transfer between courses if you change your mind.

**Bachelor of Engineering (Honours) — General Entry**

A feeder to engineering for those with less mathematics, Flinders’ general entry pathway to the Bachelor of Engineering (Honours) provides a guaranteed entry pathway for students who have passed SACE stage two general mathematics or SACE stage one mathematics. The course includes additional mathematics and physics, enabling students to transfer into and complete any of Flinders’ Bachelor of Engineering (Honours) degrees in 4.5 years or less.

**Bachelor of Engineering Science**

Gain the foundations for further study in engineering or for a career in an engineering-related field. The degree offers specialisations in biomedical engineering, civil engineering, electrical engineering, electronic engineering, mechanical engineering, software engineering, and design and technology.

This degree provides a pathway to the following degrees:

- Bachelor of Engineering (Biomedical) (Honours)^
- Bachelor of Engineering (Civil) (Honours)
- Bachelor of Engineering (Electrical and Electronic) (Honours)
- Bachelor of Engineering (Environmental) (Honours)
- Bachelor of Engineering (Maritime) (Honours)
- Bachelor of Engineering (Mechanical) (Honours)
- Bachelor of Engineering (Robotics) (Honours)
- Bachelor of Engineering (Software) (Honours).^*

* Students who transfer to the Bachelor of Engineering (Biomedical) (Honours) or Bachelor of Engineering (Software) (Honours) will still receive 36 units of credit but may not be able to complete in minimum time due to prerequisite sequences.

For more information visit: flinders.edu.au/engineering
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 15-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.
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 2022 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 Business
- 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.

[Link: satac.edu.au]

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. 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 35 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.

[Link: 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.

[Link: 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.

[Link: 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.

[Link: flinders.edu.au/study/pathways/flinderslink]
If you have work and life experience

**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](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](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.

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](flinders.edu.au/pathways)

If you have some higher education

**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](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 Award
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

Yungkurrinthi Student Engagement
Yungkurrinthi Student Engagement is 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/study/indigenous-students
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 person 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
1. 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.
2. 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.
3. 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 Yungkurrinthi 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 450 scholarships worth $2.4 million in total – ranging from $1,000 to $20,000.

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 450 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
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

How to apply

When can I start?

Flinders offers two admissions cycles each year for undergraduate degrees.

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.

Key dates
Flinders Open Days: August 2022
Semester 1 2023 start date: 27 February 2023
Semester 1 Orientation week: 20 February 2023
Semester 2 2023 start date: 24 July 2023
Semester 2 Orientation week: 24 July 2023

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
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.

Deferring
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.

Flinders Station

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.
Flinders University Campus Locations

Hospital

Buses (including loop buses)
- Flinders campus loop: 16 minutes
- Tonsley loop to Bedford Park: 15 minutes

Tonsley Station (20 minutes to CBD)

Flinders Station (22 minutes to CBD)

Train Lines

Main Roads (25 minutes to CBD)

Shopping Centre