

# Engineering



**DEAKIN**  
UNIVERSITY

- Civil engineering
- Electrical and electronics engineering
- Environmental engineering
- Mechanical engineering
- Mechatronics engineering
- Software engineering

2022 Undergraduate

# Design the infrastructure of the modern world

Develop the engineering expertise to design infrastructure, power generation and complex mechanical systems. Ranked in the top 1% in the world for engineering and technology,<sup>1</sup> you'll get a competitive edge at Deakin. Tackle real-world engineering problems in collaborative projects with industry partners and through work placements.

<sup>1</sup> Times Higher Education World University Rankings by subject 2020 and 2020 QS World University Rankings by subject.

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Published by Deakin University in March 2021. While the information published in this guide was accurate at the time of publication, Deakin University reserves the right to alter, amend or delete details of course offerings and other information published here. For the most up-to-date course information, please view our website at [deakin.edu.au](https://deakin.edu.au).

Deakin University CRICOS Provider Code: 00113B

# Your future in engineering

## A hands-on approach for a successful career

Gain practical learning experiences throughout your engineering course with our innovative and student-centred teaching method: project-oriented design-based learning (PODBL). In collaboration with industry, PODB is a key feature of our engineering degrees and will help you graduate ready to excel in your career.

As well as theory-based classes, you'll spend 50% of every trimester learning via team-based projects, taking real-world industry problems, and designing, researching, testing and evaluating solutions, with the support of an academic.

Work-integrated learning gives you the chance to undertake a full-time or part-time industry placement as part of your studies.<sup>1</sup>

To learn more about industry placements, visit [deakin.edu.au/sebe/wil](https://deakin.edu.au/sebe/wil).

## Gain professional accreditation

The School of Engineering's long-standing partnership with Engineers Australia is an important relationship and informs our teaching program. This ensures our curriculum is relevant and that you'll graduate with the skill set that employers want. Study civil, electrical and electronics, mechanical, mechatronics or environmental<sup>2</sup> engineering and you'll get a degree that's professionally accredited and internationally recognised – so you'll be able to practise as a professional engineer in numerous countries around the world.

## Real-world connections with industry

Our connection to industry extends beyond curriculum and course design to include student placements, projects and our industry advisory group, which includes members from:

- Air Radiators
- AusNet Services
- Barwon Water
- Ford
- ISCAR
- Norman Disney & Young
- SEW-EURODRIVE
- Thales.

## Experience state-of-the-art facilities

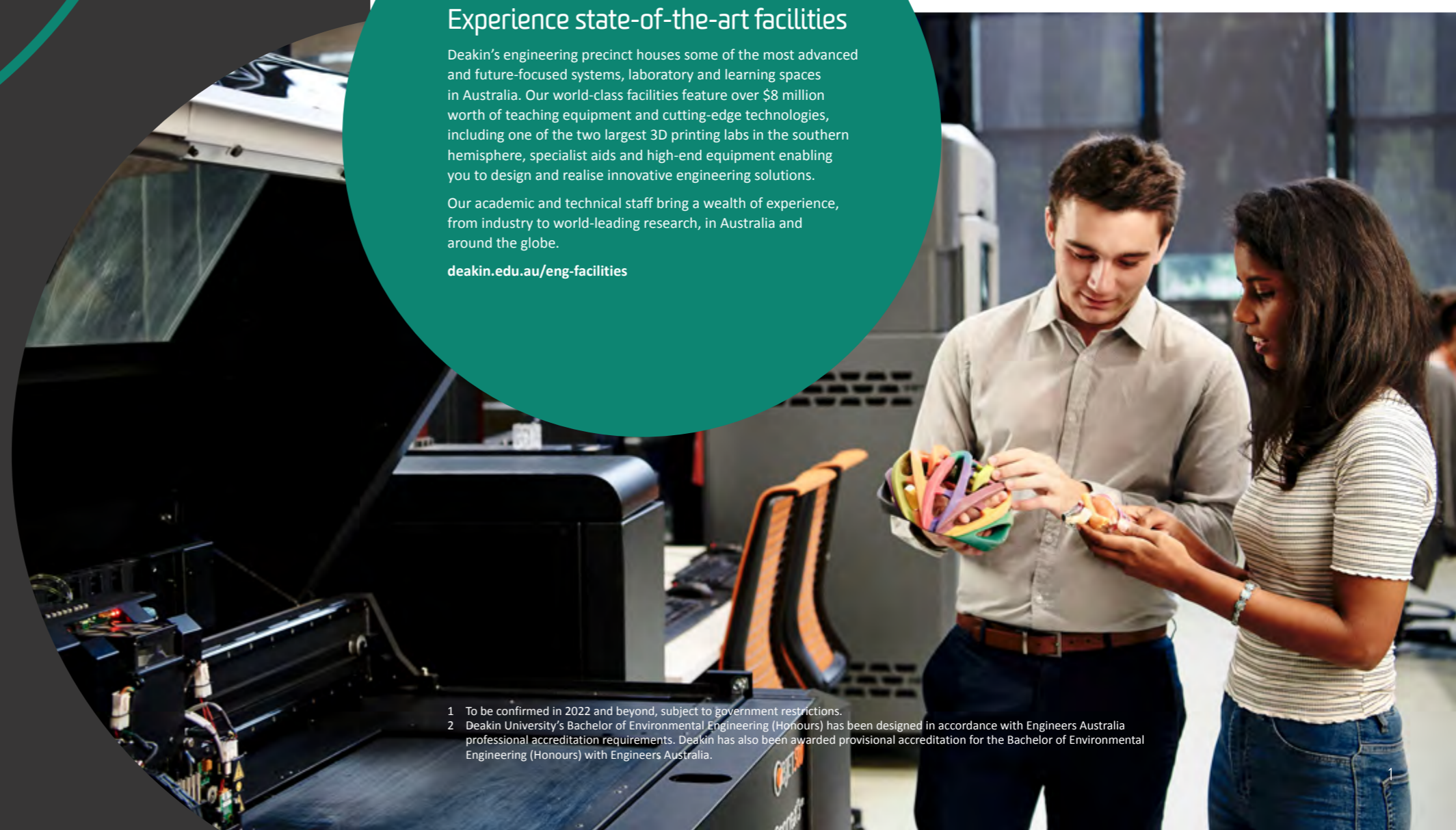
Deakin's engineering precinct houses some of the most advanced and future-focused systems, laboratory and learning spaces in Australia. Our world-class facilities feature over \$8 million worth of teaching equipment and cutting-edge technologies, including one of the two largest 3D printing labs in the southern hemisphere, specialist aids and high-end equipment enabling you to design and realise innovative engineering solutions.

Our academic and technical staff bring a wealth of experience, from industry to world-leading research, in Australia and around the globe.

[deakin.edu.au/eng-facilities](https://deakin.edu.au/eng-facilities)

<sup>1</sup> To be confirmed in 2022 and beyond, subject to government restrictions.

<sup>2</sup> Deakin University's Bachelor of Environmental Engineering (Honours) has been designed in accordance with Engineers Australia professional accreditation requirements. Deakin has also been awarded provisional accreditation for the Bachelor of Environmental Engineering (Honours) with Engineers Australia.



# Your future in engineering

## Be rewarded for your hard work

A Deakin scholarship is more than just a financial boost. It is our chance to acknowledge your accomplishments and reward your hard work, setting you on the path to success at university.

Our extensive scholarship program includes three key scholarships:

- Vice-Chancellor's Academic Excellence Scholarship
- Deakin Scholarship for Excellence
- Deakin Student Support Scholarship.

We also offer a range of donor and government-funded scholarships. Each is unique with differing criteria, rewarding aspiring students from diverse backgrounds.

[deakin.edu.au/scholarships](https://deakin.edu.au/scholarships)

## The Bridgestone World Solar Challenge

Deakin University has teamed up with leading renewable energy company Acciona to participate in the 2022 Bridgestone World Solar Challenge. The challenge? A 3000km road race from Darwin to Adelaide with a vehicle powered primarily by solar energy, developed and built entirely by the bright minds of Deakin STEM students.

Collaborations like this give Deakin STEM students the opportunity to work in an expanding industry with state-of-the-art technology that adds invaluable experience to their resume. Students will turn theory into practice, by engineering a roadworthy, energy-efficient vehicle and promoting sustainable industrialisation for future industries.

Deakin will compete against other world-class educational institutions, as students work in a team to push the boundaries of technology and make advancements for solar vehicles.

## Award recipients for the promotion of gender equity in STEM

Deakin has received the prestigious Athena SWAN Bronze Institution Award for its programs that encourage more women to study, research and work in Science, Technology, Engineering, Mathematics and Medicine (STEMM).

The Athena SWAN program is run by Science in Australia Gender Equity (SAGE), and the Bronze award recognises Deakin's extensive work in promoting gender equity, inclusivity and diversity.

## #1 Victorian university for student satisfaction

Year on year, our students are the most satisfied students of all Victorian universities.<sup>1</sup> We've ranked this highly for the past 10 years, with students being particularly happy with our:

- teaching
- learning resources
- student support
- skills development
- learner engagement.

## Gain international experience

Explore our various overseas programs, including trimester abroad, short-term partner programs, faculty-led study programs, overseas internships and international volunteering opportunities.<sup>2</sup> Deakin engineering students have studied and completed work experience in a range of countries, including China, India, Taiwan, Malaysia, USA and Sweden. Study abroad programs offer you the opportunity to pursue your degree while learning about techniques and theories that foreign countries employ, enhancing your career opportunities.

[deakin.edu.au/overseas-study](https://deakin.edu.au/overseas-study)

## Learning at Deakin through COVID-19 and beyond

As a leader in digital learning, we know our students value Deakin's connected and engaging online study environment and we also understand that many students value attending campus. At Deakin, you can be confident of not just a COVIDSafe environment, but a tailored, collaborative learning experience for each course, designed to achieve the best possible combination of online and on-campus activities whilst adhering to government regulations.

Dynamically delivered, world-class learning – it's what Deakin does best. Find out more at [deakin.edu.au/learning-at-deakin-through-covid-19](https://deakin.edu.au/learning-at-deakin-through-covid-19).

<sup>1</sup> Australian Graduate Survey 2010–2015, Graduate Outcomes Survey 2016–2019 (GOS), Quality Indicators for Learning and Teaching (QILT).

<sup>2</sup> To be confirmed in 2022 and beyond, subject to government travel restrictions.

# Disciplines

Choose your area of expertise from our disciplines (also known as study areas). Knowing which discipline you're interested in helps career advisers find the best course for you. Visit [deakin.edu.au](https://deakin.edu.au) for detailed discipline and course information, including a description of the units within each degree.

- Civil engineering
- Electrical and electronics engineering
- Environmental engineering
- Mechanical engineering
- Mechatronics engineering
- Software engineering

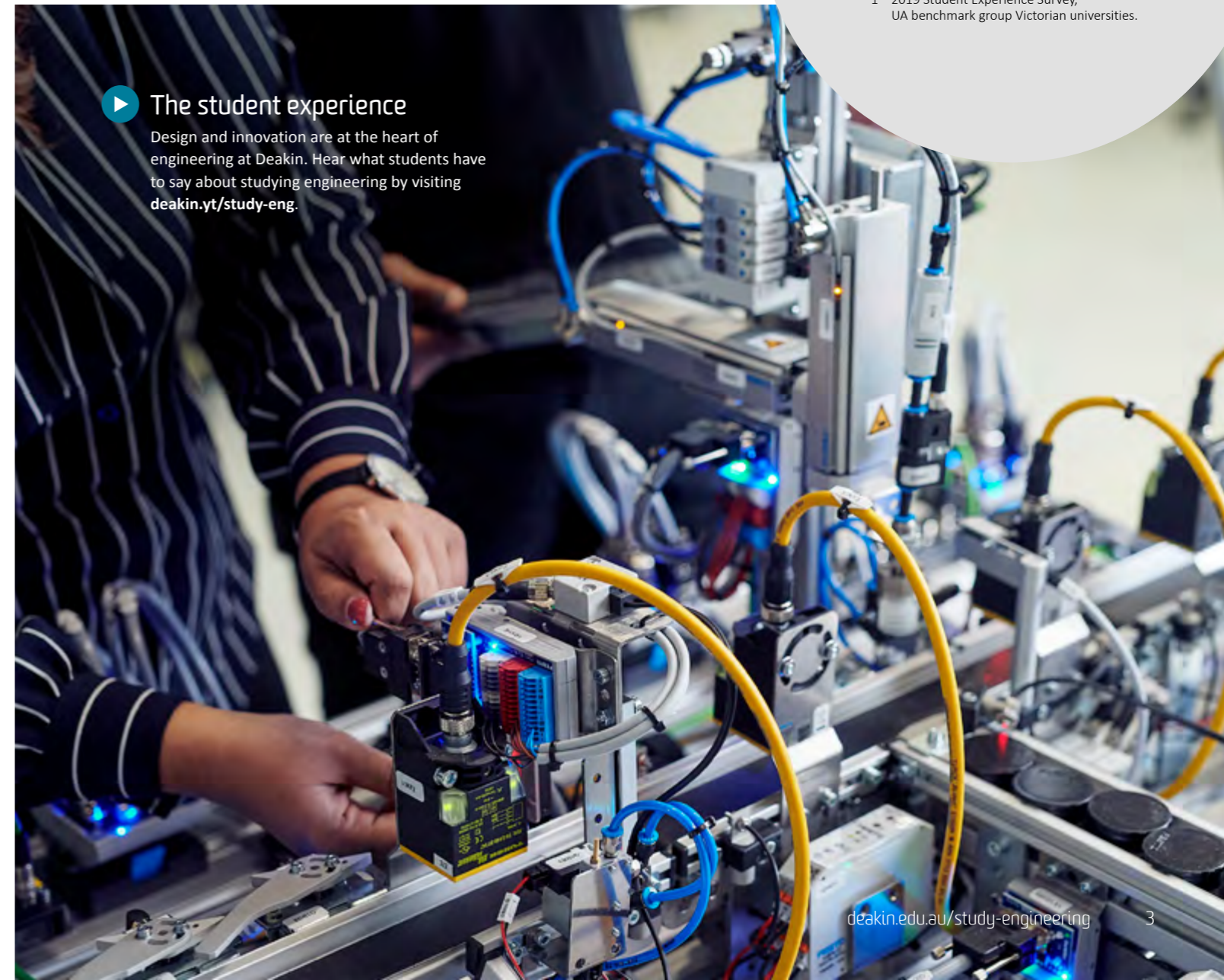
## Skills to get you a job

Gain a competitive edge in the workplace with real-world expertise and practical skills. Deakin is ranked Victoria's top university for skills development and teaching quality.<sup>1</sup>

<sup>1</sup> 2019 Student Experience Survey, UA benchmark group Victorian universities.

## The student experience

Design and innovation are at the heart of engineering at Deakin. Hear what students have to say about studying engineering by visiting [deakin.yt/study-eng](https://deakin.yt/study-eng).



## Bachelor of Civil Engineering (Honours)

**5460** **C**<sup>1</sup> **NP** **B**<sup>2</sup> **70.15** **WP** **68.15** **4**<sup>5</sup> **T1, T2**

Graduate as an industry-ready civil engineer by studying Deakin's Bachelor of Civil Engineering (Honours). You'll combine contemporary theory with hands-on projects to develop the skills needed to confidently design, construct and maintain the built infrastructure systems that are vital in our day-to-day lives. In this Engineers Australia-accredited course, you'll learn how to apply scientific and engineering principles to address complex problems and develop innovative solutions that are beneficial to organisations and the community.

### Work experience

Through Professional Engineering Practice, you'll gain industry experience by completing a minimum of 30 to 60 days of practical work experience in an engineering workplace, developing and enhancing your understanding of the engineering profession, possible career outcomes, and the opportunity to establish valuable professional networks.

### Professional recognition

This course is accredited by Engineers Australia, which gives graduates international recognition and the ability to practise as professional engineers in many countries around the world.



### Careers

With the continuous growth in civil infrastructure construction and the associated demand for civil engineers, Deakin graduates are in demand both in Australia and further abroad.

Graduates can work in a wide range of areas and industries, including:

- construction companies
- councils
- engineering consultancy firms
- government bodies
- mining industry
- public works departments
- road and transport authorities
- water authorities

and, also take a wide range of roles, including:

- geotechnical engineer
- infrastructure engineer
- railway engineer
- research engineer
- road engineer
- structural engineer
- transportation engineer
- water engineer.



'I always wanted to become a civil engineer. Looking at Deakin's course content, I realised that it's more industry-oriented and I thought that would provide a great entry into my dream job as a civil engineer.'

**Raveena Ranepura Dewage**  
 Bachelor of Civil Engineering (Honours) graduate

## IGNITED Scholarship

If you're female and about to start an undergraduate degree in industry areas including engineering, information technology or construction management, you could be eligible for an IGNITED Scholarship.

Each scholarship includes a payment of \$625 per credit point over the normal duration of the course and recipients are also assigned an academic mentor.

[deakin.edu.au/ignited-scholarship](http://deakin.edu.au/ignited-scholarship)



### Course structure<sup>3,4</sup>

This 32-credit-point course consists of 31 credit points of core units and one elective unit.

	Trimester 1	Trimester 2
<b>Year 1</b>	Design Fundamentals (2 credit points) Applied Algebra and Statistics Engineering Physics	Materials Engineering Project (2 credit points) Introduction to Mathematical Modelling Programming for Engineers
<b>Year 2</b>	Geotechnical Investigation and Design (2 credit points) Engineering Modelling Fluid Mechanics	Structural Design (2 credit points) Stress and Failure Analysis Road and Pavement Engineering
<b>Year 3</b>	Water Engineering Design (2 credit points) Theory of Structures Hydrology and Hydraulics	Reinforced Concrete Design (2 credit points) Geotechnical Engineering Steel and Timber Structures
<b>Year 4</b>	Engineering Project A (2 credit points) Traffic and Transport Engineering Elective	Engineering Project B (2 credit points) Infrastructure Engineering Professional Engineering Practice

[deakin.edu.au/course/bachelor-civil-engineering-honours](http://deakin.edu.au/course/bachelor-civil-engineering-honours)

## Related course

### Bachelor of Construction Management (Honours)

**5346** **WF** **60.00** **4**<sup>5</sup> **T1, T2**

Develop an in-depth understanding of the business of construction, from economics and law to technology. Deakin's Bachelor of Construction Management (Honours) equips you with market-ready skills for construction management, quantity surveying and property development, enabling you to work confidently across projects large and small. With a strong focus on practical learning, you'll develop the initiative and ability to hit the ground running.

For more information about this course, please refer to Deakin's *2022 Undergraduate Architecture and construction management* booklet or visit [deakin.edu.au/course/bachelor-construction-management-honours](http://deakin.edu.au/course/bachelor-construction-management-honours).

# Courses

## Bachelor of Electrical and Electronics Engineering (Honours)

5461 [C]<sup>1</sup> [NP] [B]<sup>2</sup> [NP] [WP] 71.35 [4] T1, T2

Gain practical, market-ready skills when you study Deakin's Bachelor of Electrical and Electronics Engineering (Honours). Explore renewables, alternative energy generation and the role of energy production in climate change, and get the hands-on experience and theoretical knowledge to tackle energy production challenges in a changing world. You'll have access to the very latest electrical and electronics engineering tools in world-class, multi-million-dollar facilities.

### Work experience

Through Professional Engineering Practice, you'll gain industry experience by completing a minimum of 30 to 60 days of practical work experience in an engineering workplace, developing and enhancing your understanding of the engineering profession, possible career outcomes, and the opportunity to establish valuable professional networks.

### Careers

Deakin's Bachelor of Electrical and Electronics Engineering (Honours) graduates may find employment across a range of roles, including:

- automotive electrician
- design engineer
- electrical design engineer
- electronic test engineer
- industrial engineer
- multimedia systems specialist
- PLC programmer
- power engineer
- research engineer
- renewable energy consultant
- robotics engineer and technician
- solar cell technician
- special effects technician
- telecommunications engineer.



Students will gain hands-on experience in our state-of-the-art engineering precinct with access to our Renewable and AusNet Electrical Engineering Lab and High Voltage (HV) Lab.

### Course structure<sup>3,4</sup>

This 32-credit-point course consists of 31 credit points of core units and one elective unit.

	Trimester 1	Trimester 2
<b>Year 1</b>	Design Fundamentals (2 credit points) Engineering Physics Applied Algebra and Statistics	Electrical Systems Engineering Project (2 credit points) Introduction to Mathematical Modelling Programming for Engineers
<b>Year 2</b>	Power Engineering Design (2 credit points) Engineering Modelling Analogue and Digital Electronics	Distributed Generation System Embedded System Design (2 credit points) Power Electronics
<b>Year 3</b>	Transmission and Distribution System Design (2 credit points) Systems and Signals Data Communication	Power System Protection Design and Safety (2 credit points) Electrical Machines and Drives Control Systems
<b>Year 4</b>	Engineering Project A (2 credit points) SCADA and PLC Elective	Engineering Project B (2 credit points) Power System Analysis Professional Engineering Practice

[deakin.edu.au/course/bachelor-electrical-and-electronics-engineering-honours](https://deakin.edu.au/course/bachelor-electrical-and-electronics-engineering-honours)

### Professional recognition

This course is accredited by Engineers Australia, which gives graduates international recognition and the ability to practise as professional engineers in many countries around the world.



1 Cloud (online) students are required to participate in campus-based intensive activities each trimester at the Geelong Warrn Ponds Campus.  
2 Only the first year of engineering is available at the Melbourne Burwood Campus. Students undertaking first year at the Melbourne Burwood Campus are required to complete their course either at the Geelong Warrn Ponds Campus or via Cloud (online) learning.  
3 This course structure should be used as a guide only and advice should be sought when selecting units.  
4 Academic Integrity (STP050), Career Tools for Employability (STP010) and Introduction to Safety and Project Oriented Learning (SEJ010) are compulsory 0-credit-point units that you are required to undertake as part of this course.

NP means not published – less than five offers made to recent secondary education applicants.

Deakin code 5342 Cloud (online) [C]  
ATAR 70.00 Melbourne Burwood Campus [B]  
Course duration in years 3 Geelong Waterfront Campus [WF]  
Trimester T Geelong Warrn Ponds Campus [WP]  
Warrnambool Campus [WB]

## Bachelor of Environmental Engineering (Honours)

5465 [C]<sup>1</sup> [NP] [WP] 71.50 [4] T1, T2

Graduate ready to tackle global environmental issues such as climate change, sustainability and pollution when you study the Bachelor of Environmental Engineering (Honours) at Deakin. Gain knowledge across the environmental engineering industry in areas including waste management, water engineering, catchment management and soil and water remediation. Develop solutions-led technical and professional skills to put you in high demand in this future-focused field.

### Work experience

You'll gain industry experience by completing a minimum of 30 to 60 days of practical work experience in an engineering workplace, developing and enhancing your understanding of the environmental engineering profession, possible career outcomes and the opportunity to establish valuable professional networks.

### Careers

Graduates will be in high demand in this rapidly evolving field, addressing global issues like climate change, sustainability and water security across a range of industries. Graduates may find employment in:

- air pollution and emissions control
- catchment and natural resource management
- environmental protection
- environmental consultancy
- government departments – local, state and federal
- resources – mining, oil and gas
- waste management and recycling
- water and wastewater treatment.

### Course structure<sup>2,3</sup>

This 32-credit-point course consists of 31 credit points of core units and one elective unit.

	Trimester 1	Trimester 2
<b>Year 1</b>	Environmental Design Ecology and the Environment Applied Algebra and Statistics Engineering Physics	Chemistry for the Professional Sciences Global Environmental Systems Introduction to Mathematical Modelling Programming for Engineers
<b>Year 2</b>	Environmental Analysis (2 credit points) Engineering Modelling Fluid Mechanics	Environmental Health Engineering (2 credit points) Introduction to Geographic Information Systems Analysing Marine Dynamics
<b>Year 3</b>	Water Engineering Design (2 credit points) Air and Noise Pollution and Control Hydrology and Hydraulics	Waste Management Systems (2 credit points) Environmental Protection and Planning Risks to Healthy Environments
<b>Year 4</b>	Engineering Project A (2 credit points) Integrated Catchment Systems Elective	Engineering Project B (2 credit points) Infrastructure Engineering Professional Engineering Practice <sup>4</sup>

[deakin.edu.au/course/bachelor-environmental-engineering-honours](https://deakin.edu.au/course/bachelor-environmental-engineering-honours)

### Professional recognition

This course has been designed in accordance with Engineers Australia's professional accreditation requirements. Deakin has been awarded provisional accreditation for the Bachelor of Environmental Engineering (Honours) with Engineers Australia.

1 Cloud (online) students are required to participate in campus-based intensive activities each trimester at the Geelong Warrn Ponds Campus.  
2 This course structure should be used as a guide only and advice should be sought when selecting units.  
3 Academic Integrity (STP050), Career Tools for Employability (STP010), Introduction to Safety and Project Oriented Learning (SEJ010) and Laboratory and Fieldwork Safety Induction program (SLE010) are compulsory 0-credit-point units that you are required to undertake as part of this course.  
4 This unit is offered Trimester 1, 2 or 3.

NP means not published – less than five offers made to recent secondary education applicants.

### The student experience

Want to make or design sustainable solutions for our future? Our students discuss their experience studying environmental engineering at Deakin. [deakin.yt/enviro-eng](https://deakin.yt/enviro-eng)



'The teaching and support staff at Deakin are brilliant. They each have remarkable workplace expertise that they bring to life in academic material, and course work is built around real-world application.'

**Vaughn Mitchell**  
Bachelor of Environmental Engineering (Honours) student

# Courses

Deakin code	5342	Cloud (online)	C
ATAR	70.00	Melbourne Burwood Campus	B
Course duration in years	3	Geelong Waterfront Campus	WF
Trimester	T	Geelong Waurn Ponds Campus	WP
		Warrnambool Campus	WB

## Bachelor of Mechanical Engineering (Honours)

5462 C<sup>1</sup> NP B<sup>2</sup> 70.65 WP 71.55 4 T1, T2

Deakin's Bachelor of Mechanical Engineering (Honours) allows you to turn your passion into a rewarding career. Today, mechanical engineers lend their expertise to the development of almost every design imaginable. Not only will this internationally recognised program prepare you to be an industry-ready professional engineer, it'll give you the chance to get hands-on with advanced technologies in our multi-million-dollar engineering precinct.

### Work experience

Through Professional Engineering Practice, you'll gain industry experience by completing a minimum of 30 to 60 days of practical work experience in an engineering workplace, developing and enhancing your understanding of the engineering profession, possible career outcomes, and the opportunity to establish valuable professional networks.

During the course you'll cover core mechanical disciplines including machine, structural and thermo-fluids design and industrial control, while developing professional skills in project management, communication, and teamwork. You'll also have opportunities to test your mechanical design and engineering skills in challenges such as the World Solar Challenge and Warman Design and Build Competition.

### Careers

With an international skills shortage in the engineering industry, and roles expected to rise significantly in the next five years, Deakin graduates are in demand both in Australia and further abroad.

Not only that, employers seek out Deakin graduates for their forward-thinking, innovative and entrepreneurial qualities.

Graduate ready to transition into a number of areas and roles including:

- advanced manufacturing
- aerospace
- automotive
- biomedical
- consultant
- control and systems design
- defence
- field and test engineering
- mining
- product development
- railroad
- research and development
- textiles.

Mechanical engineers use their skills in the design development of diverse and complex products, including cars, aeroplanes, biomedical devices and renewable energy systems.

### Professional recognition

This course is accredited by Engineers Australia, which gives graduates international recognition and the ability to practise as professional engineers in many countries around the world.



### Course structure<sup>3,4</sup>

This 32-credit-point course consists of 31 credit points of core units and one elective unit.

	Trimester 1	Trimester 2
<b>Year 1</b>	Design Fundamentals (2 credit points) Engineering Physics Applied Algebra and Statistics	Materials Engineering Project (2 credit points) Introduction to Mathematical Modelling Programming for Engineers
<b>Year 2</b>	Machine Design (2 credit points) Fluid Mechanics Engineering Modelling	Structural Design (2 credit points) Stress and Failure Analysis Thermodynamics
<b>Year 3</b>	Thermo-Fluid System Design (2 credit points) Product Development Manufacturing	Industrial Control (2 credit points) Advanced Stress Analysis Dynamics of Machines
<b>Year 4</b>	Engineering Project A (2 credit points) Computational Fluid Dynamics Elective	Engineering Project B (2 credit points) Advanced Modelling and Simulation Professional Engineering Practice

[deakin.edu.au/course/bachelor-mechanical-engineering-honours](http://deakin.edu.au/course/bachelor-mechanical-engineering-honours)



The learning environment at Deakin is very collaborative. Academic staff are always available for assistance and students work alongside one another.

**Jordan Ritchie**  
Bachelor of Mechanical Engineering (Honours) graduate

## Bachelor of Mechatronics Engineering (Honours)

5463 C<sup>1</sup> NP B<sup>2</sup> 77.30 WP 66.55 4 T1, T2

Deakin's Bachelor of Mechatronics Engineering (Honours) prepares you to be an industry-ready professional engineer, capable of creating the electronics, robots and autonomous systems that power our future. You'll learn how to design, program and integrate electronic devices with mechanical designs to deliver innovative solutions to real-world problems such as anti-lock brakes, self-driving cars and even artificial hearts.

### Work experience

Through Professional Engineering Practice, you'll gain industry experience by completing a minimum of 30 to 60 days of practical work experience in an engineering workplace, developing and enhancing your understanding of the engineering profession, possible career outcomes, and the opportunity to establish valuable professional networks.

### Careers

With an international skills shortage in the industry, and roles expected to rise significantly in the next five years, Deakin graduates are in demand both in Australia and further abroad.

Not only that, employers seek out Deakin graduates for their forward-thinking, innovative and entrepreneurial qualities.

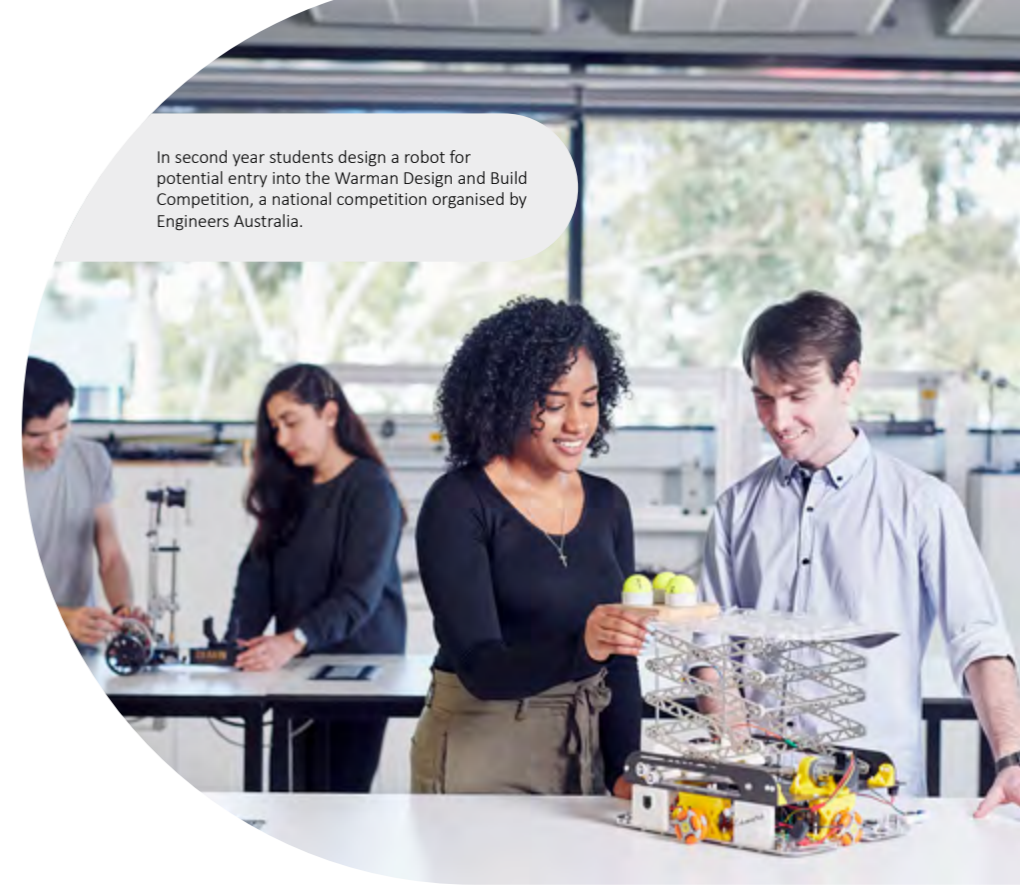
Mix electrical, mechanical and robotics engineering into a single degree to secure your future career in a diverse range of industries developing the systems of the future.

As a mechatronics engineering graduate, you could be employed in the following roles:

- automation engineer
- biomedical service engineer
- control systems engineer
- electronics test engineer
- robotics engineer.

### Professional recognition

This course is accredited by Engineers Australia, which gives graduates international recognition and the ability to practise as professional engineers in many countries around the world.



In second year students design a robot for potential entry into the Warman Design and Build Competition, a national competition organised by Engineers Australia.

## The student experience

Mechatronics is more than just robots; it's the future of the industry. Two of our students discuss the benefits of the multidisciplinary course and the hands-on learning approach at Deakin. [deakin.yt/mechatronics-eng](http://deakin.yt/mechatronics-eng)

### Course structure<sup>3,4</sup>

This 32-credit-point course consists of 30 credit points of core units and two elective units.

	Trimester 1	Trimester 2
<b>Year 1</b>	Design Fundamentals (2 credit points) Engineering Physics Applied Algebra and Statistics	Electrical Systems Engineering Project (2 credit points) Introduction to Mathematical Modelling Programming for Engineers
<b>Year 2</b>	Machine Design (2 credit points) Analogue and Digital Electronics Engineering Modelling	Embedded System Design (2 credit points) Programming and Visualisation Power Electronics
<b>Year 3</b>	Mechatronic Design (2 credit points) Artificial Intelligence for Autonomous Systems Data Communication	Electromechanical Systems Design (2 credit points) Control Systems Dynamics of Machines
<b>Year 4</b>	Engineering Project A (2 credit points) Elective x 2	Engineering Project B (2 credit points) Virtual and Augmented Interfaces Professional Engineering Practice

[deakin.edu.au/course/bachelor-mechatronics-engineering-honours](http://deakin.edu.au/course/bachelor-mechatronics-engineering-honours)

1 Cloud (online) students are required to participate in campus-based intensive activities each trimester at the Geelong Waurn Ponds Campus.  
2 Only the first year of engineering is available at the Melbourne Burwood Campus. Students undertaking first year at the Melbourne Burwood Campus are required to complete their course either at the Geelong Waurn Ponds Campus or via Cloud (online) learning.  
3 This course structure should be used as a guide only and advice should be sought when selecting units.  
4 Academic Integrity (STP050), Career Tools for Employability (STP010) and Introduction to Safety and Project Oriented Learning (SEJ010) are compulsory 0-credit-point units that you are required to undertake as part of this course.

NP means not published – less than five offers made to recent secondary education applicants.

# Courses

## Bachelor of Software Engineering (Honours)

S464 C NP B 64.60 4 T1, T2

Create the smart software and systems of the future by studying Deakin's Bachelor of Software Engineering (Honours). The course arms you with the skills needed to build disruptive technologies that create change, making you a sought-after expert ready to solve tomorrow's business problems through creative computing solutions. Explore a broad range of exciting study areas, including robotics, algorithms, programming and software architecture, and apply your skills in world-class facilities.

### Work experience

You will undertake a core professional industry experience unit as part of your course, which involves an industry-based placement for a minimum of 30 to 60 days with an approved organisation. This will provide you with the opportunity to apply what you are learning in your course, explore career options, experience workplace culture and practices, and develop a professional network before you graduate.

Visit [deakin.edu.au/sebe/wil](https://deakin.edu.au/sebe/wil) to find out more information.

### Professional recognition

This course has been designed in accordance with the professional accreditation requirements of Engineers Australia and the Australian Computer Society. Deakin has been awarded accreditation for the Bachelor of Software Engineering (Honours) with both the Australian Computer Society (ACS) and Engineers Australia.



## The student experience

Learn to shape the software systems of the future and drive digital transformations as an innovative software engineer. [deakin.yt/software-eng](https://deakin.yt/software-eng)

## Join our Peer Support Network (PSN)

Sign up to the Faculty of Science, Engineering and Built Environment's PSN in your first year at Deakin to get support and guidance from more senior students in your course. You'll learn about the support services and facilities available, while gaining useful tips about studying at Deakin.

[deakin.edu.au/sebe/peer-support](https://deakin.edu.au/sebe/peer-support)

Deakin code	S342	Cloud (online)	C
ATAR	70.00	Melbourne Burwood Campus	B
Course duration in years	3	Geelong Waterfront Campus	WF
Trimester	T	Geelong Waurn Ponds Campus	WP
		Warrnambool Campus	WB

### Careers

Graduates will be equipped to find employment in diverse areas of software engineering. You'll be able to develop and implement state-of-the-art smart devices, systems and application frameworks for industries including health, agriculture, manufacturing and transport.

This can lead to employment in roles such as:

- business analyst
- business development
- data engineer
- DevOps engineer
- embedded systems developer
- IoT system engineer
- machine learning engineer
- mobile applications developer
- programmer
- project manager
- robotics programmer
- software developer
- software engineer
- systems architect
- web applications developer.

### Course structure

32 credit points – 24 core units (totalling 28 credit points), which include a compulsory internship unit, four elective units and four 0-credit-point units relating to safety and project orientated learning, safety induction, career tools for employability and academic integrity.

For more information about this course, please refer to Deakin's 2022 *Undergraduate Information technology* booklet or visit [deakin.edu.au/course/bachelor-software-engineering-honours](https://deakin.edu.au/course/bachelor-software-engineering-honours).

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## Gain a scholarship to help you fund your degree

### Barwon Water Scholarship

If you're a Geelong campus-based student commencing a full-time undergraduate degree in one of the following disciplines: engineering, commerce, finance, information technology, public relations, journalism or human resource management, we encourage you to apply for this scholarship. This scholarship is valued at \$2000 per year, with a total scholarship value of \$6000.

[deakin.edu.au/barwon-water-scholarship](https://deakin.edu.au/barwon-water-scholarship)

### Barwon Water Scholarship for Women in STEM

Female students commencing their first year of study full time in a course offered by the Faculty of Science, Engineering and Built Environment at the Geelong Waurn Ponds Campus or Geelong Waterfront Campus are encouraged to apply for a Barwon Water Scholarship for Women in STEM. This scholarship is valued at \$2000 per year, with a total scholarship value of \$6000.

[deakin.edu.au/barwon-water-women-scholarship](https://deakin.edu.au/barwon-water-women-scholarship)

See the full range of scholarships available at [deakin.edu.au/scholarships](https://deakin.edu.au/scholarships).

## Australia's #1 university career service<sup>1</sup>

From day one at Deakin, and well into the future after graduation, our award-winning career service – DeakinTALENT – will prepare you for the jobs of tomorrow. You'll have lifetime access to career coaching, industry networking opportunities and a comprehensive suite of digital resources that will help you become the most employable version of yourself.

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<sup>1</sup> Australian Graduate Recruitment Industry Awards, 2017, 2018, 2019 winner for the most popular career service in Australia.

Course and entry requirements	Campus and ATAR	Course duration	Trimester intakes	Tuition fee <sup>1</sup>
<b>Bachelor of Civil Engineering (Honours)   S460</b> <b>Y12</b> <sup>2,3</sup> VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL; and a study score of at least 20 in one of Maths: Mathematical Methods (any) or Maths: Specialist Mathematics. <b>NY12</b> <sup>3,4</sup> As for Year 12 or equivalent, for further information refer to <a href="https://deakin.edu.au/course/S460">deakin.edu.au/course/S460</a>	<b>C</b> <sup>5</sup> NP <b>B</b> <sup>6</sup> 70.15 <b>WP</b> 68.15	4	T1, T2	\$7094
<b>Bachelor of Electrical and Electronics Engineering (Honours)   S461</b> <b>Y12</b> <sup>2,3</sup> VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL; and a study score of at least 20 in one of Maths: Mathematical Methods (any) or Maths: Specialist Mathematics. <b>NY12</b> <sup>3,4</sup> As for Year 12 or equivalent, for further information refer to <a href="https://deakin.edu.au/course/S461">deakin.edu.au/course/S461</a>	<b>C</b> <sup>5</sup> NP <b>B</b> <sup>6</sup> NP <b>WP</b> 71.35	4	T1, T2	\$7156
<b>Bachelor of Environmental Engineering (Honours)   S465</b> <b>Y12</b> <sup>2,3</sup> VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL; and a study score of at least 20 in one of Maths: Mathematical Methods (any) or Maths: Specialist Mathematics. <b>NY12</b> <sup>3,4</sup> As for Year 12 or equivalent, for further information refer to <a href="https://deakin.edu.au/course/S465">deakin.edu.au/course/S465</a>	<b>C</b> <sup>5</sup> NP <b>WP</b> 71.50	4	T1, T2	\$7041
<b>Bachelor of Mechanical Engineering (Honours)   S462</b> <b>Y12</b> <sup>2,3</sup> VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL; and a study score of at least 20 in one of Maths: Mathematical Methods (any) or Maths: Specialist Mathematics. <b>NY12</b> <sup>3,4</sup> As for Year 12 or equivalent, for further information refer to <a href="https://deakin.edu.au/course/S462">deakin.edu.au/course/S462</a>	<b>C</b> <sup>5</sup> NP <b>B</b> <sup>6</sup> 70.65 <b>WP</b> 71.55	4	T1, T2	\$7138
<b>Bachelor of Mechatronics Engineering (Honours)   S463</b> <b>Y12</b> <sup>2,3</sup> VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL; and a study score of at least 20 in one of Maths: Mathematical Methods (any) or Maths: Specialist Mathematics. <b>NY12</b> <sup>3,4</sup> As for Year 12 or equivalent, for further information refer to <a href="https://deakin.edu.au/course/S463">deakin.edu.au/course/S463</a>	<b>C</b> <sup>5</sup> NP <b>B</b> <sup>6</sup> 77.30 <b>WP</b> 66.55	4	T1, T2	\$6936
<b>Bachelor of Software Engineering (Honours)   S464</b> <b>Y12</b> <sup>2,3</sup> VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL; and a study score of at least 20 in one of Maths: Mathematical Methods (any) or Maths: Specialist Mathematics. <b>NY12</b> <sup>3,4</sup> As for Year 12 or equivalent, for further information refer to <a href="https://deakin.edu.au/course/S464">deakin.edu.au/course/S464</a>	<b>C</b> NP <b>B</b> 64.60	4	T1, T2	\$7219

**Related course**

<b>Bachelor of Construction Management (Honours)   S346</b> <b>Y12</b> <sup>2,3</sup> VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. <b>NY12</b> <sup>3,4</sup> As for Year 12 or equivalent, for further information refer to <a href="https://deakin.edu.au/course/S346">deakin.edu.au/course/S346</a>	<b>WF</b> 60.00	4 <sup>7</sup>	T1, T2	\$8045
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- The 2021 indicative Commonwealth Supported Place (CSP) fee is based on a typical enrolment for domestic students enrolled in two trimesters of full-time study, or 8 credit points, unless otherwise indicated. This fee should be used as a guide only and is subject to change. The fees displayed do not reflect the entire cost of the course if it's completed over a number of years and does not include the Student Services and Amenities Fee or course-related equipment costs.
  - Recent secondary education applicants include current Year 12 students in 2021, as well as Year 12 graduates from 2020 and 2019.
  - International student entry requirements can be found at: [deakin.edu.au/international-students](https://deakin.edu.au/international-students).
  - There are four categories under which non-Year 12 applicants may apply to Deakin:
    - applicants with higher education study
    - applicants with Vocational Education and Training (VET) study
    - applicants with work and life experience
    - applicants who completed Year 12 in 2018 or earlier.
 Visit [deakin.edu.au/course](https://deakin.edu.au/course) and head to the course of interest to find out further details on admission requirements.
  - Cloud (online) students will be required to participate in campus-based intensive activities each trimester at the Geelong Warrn Ponds Campus.
  - Only the first year of engineering is available at the Melbourne Burwood Campus. Students undertaking first year at the Melbourne Burwood Campus are required to complete their course either at the Geelong Warrn Ponds Campus or via Cloud (online) learning.
  - Students have the opportunity to complete this course in three years of full-time study by undertaking units in Trimester 3.
- NP means not published – less than five offers made to recent secondary education applicants.

Cloud (online) **C**  
 Melbourne Burwood Campus **B**  
 Geelong Waterfront Campus **WF**  
 Geelong Warrn Ponds Campus **WP**  
 Warrnambool Campus **WB**

Recent secondary education **Y12**  
 Non-Year 12 **NY12**

**this.**

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Deakin understands that evidencing and articulating your capabilities is vital to gaining opportunities. Deakin Hallmarks are prestigious University awards that recognise students' outstanding achievements and capabilities that are key to employment success. After graduating, they offer students the opportunity to differentiate themselves to employers. To find out more visit [deakin.edu.au/hallmarks](https://deakin.edu.au/hallmarks), including how Hallmarks are awarded.

Communication	Digital literacy	Teamwork	Critical thinking	Problem solving	Self management	Global citizenship	Creativity	Digital innovation	Entrepreneurial thinking	Leadership

# Contact us

**We're here to help**  
 We have staff at each of our campuses who are more than happy to answer your general queries.

**Prospective student enquiries**  
**Domestic students**  
 1800 693 888  
[myfuture@deakin.edu.au](mailto:myfuture@deakin.edu.au)

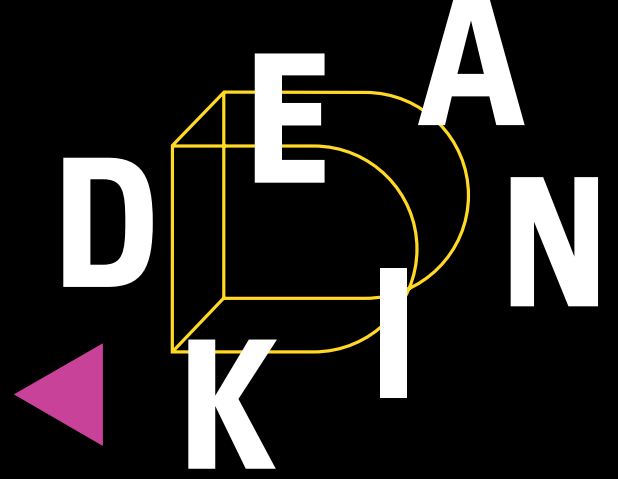
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- Other useful websites**
- [vtac.edu.au](https://vtac.edu.au)
  - [studyassist.gov.au](https://studyassist.gov.au)
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  - [youthcentral.vic.gov.au](https://youthcentral.vic.gov.au)





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Engineering

