

Bachelor of Mechatronics Engineering (Honours)

Undergraduate



Course overview

Deakin's Bachelor of Mechatronics Engineering (Honours) prepares you to be an industry-ready 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.

Mechatronics engineering at Deakin trains you in a range of engineering disciplines to ensure you graduate with a broad skill set that enhances your employability. This course is tailored to industry and gives you access to cutting-edge technology and facilities in our multi-million dollar engineering precinct, including state-of-the-art mechatronics systems and robots. Discover what it takes to work in teams on industry projects with our project-based learning activities.

Industry informed teaching

Project-Oriented Design-Based Learning (PODBL) in collaboration with industry is a key feature of our engineering courses, bringing together theory, site studies and laboratory investigations, including Design Fundamentals, Electrical Systems Engineering Project and Embedded System Design. Beginning in the first trimester of study and continuing throughout your degree, you will have opportunities to work independently and in groups, to actively develop ideas and design products that satisfy industry client needs.

Course structure

Bachelor of Mechatronics Engineering (Honours)

Location: Melbourne Burwood Campus¹ [B], Geelong Waurin Ponds Campus [WP] and Cloud Campus² [C]

Duration: 4 years full-time study (or part-time equivalent)

Intake: March (Trimester 1), July (Trimester 2)³

Deakin code: S463

ATAR score⁴: [B] 71.75 [C] N/A⁵ [WP] 67.40

VTAC code: Melbourne Burwood Campus (1400514791), Geelong Waurin Ponds Campus (1400314791), Cloud Campus (1400614791)

The Bachelor of Mechatronics Engineering (Honours) consists of 32 credit points of study, including 25 core units (totalling 30 credit points) and 2 elective units (totalling 2 credit points).

Professional industry experience

Professional Engineering Practice is a compulsory unit in all Deakin engineering degrees. This means you will have a minimum of 60 days work experience in one or more organisations, giving you insight into your future career options.

Career opportunities

Graduates can expect to gain employment in areas including factory control, automation and control system design, as electronic control systems engineers or robotics engineers.

- 1 The first year is available at all three campuses. Students undertaking first year at the Melbourne Burwood Campus are required to complete their course at either the Geelong Waurin Ponds Campus or via the Cloud Campus.
- 2 Cloud Campus students are required to participate in campus-based intensive activities each trimester at the Geelong Waurin Ponds Campus.
- 3 Trimester 2 intake only available at Waurin Ponds (Geelong) and Cloud Campus.
- 4 Lowest selection rank of an applicant to which an offer was made in 2020.
- 5 The ATAR is 'unpublished'. 'Unpublished' means the course is available at this campus, but the lowest selection rank of an applicant to which an offer was made in isn't available.

Hear what our students have to say
deakin.yt/mechatronics-eng



deakin.edu.au/course/S463

'My advice for someone considering mechatronics or any form of engineering is not to be discouraged by the requirements of hard skills such as mathematics. Although important, what makes a great engineer is a strong set of soft skills such as problem-solving, adaptability and work ethic.'

Genevieve Zeiler

Bachelor of Mechatronics Engineering (Honours) student



World-class facilities

Engineering students at Deakin will have access to our state-of-the-art engineering precinct at the Geelong Waurn Ponds Campus. Our world-class facilities feature over \$8 million worth of teaching equipment.

The cutting-edge technologies, including one of the two largest 3D printing labs in the southern hemisphere, specialist aids and high-end equipment, enable yourself and researchers to be creative and come up with innovative solutions. Having access to some of the best facilities in the Australian sector allows students to realise and validate their designs through combinations of computer simulation, prototyping, testing and manufacturing.

Key facilities/laboratories

- Virtual reality (VR) lab
- 3D printers - one of the two largest 3D printing labs in the southern hemisphere
- Design and realisation studios
- Deakin AusNet Services electrical engineering lab
- Materials science corrosion and polymer lab
- Concrete and structural testing facilities
- CNC machining centres
- Mechatronics and electronics lab
- High voltage lab - capable of reaching voltages up to 500kV
- Digital manufacturing lab
- Network sensing control lab.

Find out more at deakin.edu.au/eng-facilities.

Professional recognition

Deakin's Bachelor of Mechatronics Engineering (Honours) course is accredited by Engineers Australia, which gives the degrees international recognition, allowing graduates to practise as professional engineers in many countries around the world.

Interested in applying?

Entry requirements

Entry for applicants with recent secondary education* will be based on their performance in Senior Secondary Certificate of Education, with pre-requisite units 3 and 4; a study score of at least 25 in English EAL (English as an additional language) or 20 in English other than EAL and a study score of at least 20 in mathematical methods (any) or specialist mathematics (or equivalent).

Entry for applicants with previous Tertiary, VET, life or work experience: Prerequisites of English and mathematics as for year 12 school leavers (or equivalent). Entry will be based on their performance in:

- Senior Secondary Certificate of Education with ATAR of at least 50 or equivalent OR
- Certificate IV in a related discipline OR
- Diploma in any discipline or 50% completion of Diploma in a related discipline OR
- Successful completion of relevant study – equivalent to at least two Deakin University units – at an accredited higher education institution OR
- Evidence of academic capability judged to be equivalent, including Foundation program approved by Faculty Board, or relevant work or life experience.

How to apply

Depending on your course, our flexible trimester system means you may be able to start in Trimester 1 (March), 2 (July) or 3 (November).

If you're currently enrolled in Year 12 or a recent secondary applicant (ie. have completed Year 12 in the past two years) your application for Trimester 1 must be made through VTAC, www.vtac.edu.au. Note that when you apply via VTAC, you can't also apply directly to Deakin.

Conversely, if you have previous higher education, VET or work experience, you can apply directly to Deakin.

Applications for Trimester 2 or 3 should be made directly to Deakin via the applicant portal, deakin.edu.au/apply.

* Includes those currently enrolled in Year 12 and those who have completed Year 12 in the past two years.

1800 MYFUTURE (1800 693 888)
myfuture@deakin.edu.au

deakin.edu.au/course/S463

While the information provided here was correct at the time of publication, Deakin University reserves the right to alter, amend or delete details of the course and unit offerings. Last updated June 2020.

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