Bachelor of Electrical and Electronics Engineering (Honours)

Learn to design, construct and manage power generation, distribution and usage via Deakin's Bachelor of Electrical and Electronics Engineering (Honours).

Covering the broad areas of electrical and electronics engineering disciplines, this course gives you in-demand skills to pursue a range of careers. You’ll use industry standard tools in world-class facilities and learn from teachers who are active in the industry, so you always have the latest techniques and knowledge at your fingertips.

Course overview

The course encourages the responsible use of electrical power in a changing climate, and covers a broad range of electrical and electronic engineering disciplines including renewable electrical power generation; smart distribution; urban, industrial, rural and regional power usage; and the role of energy production and efficiency in climate change. You’ll also develop an understanding of the ethical considerations and contemporary technical issues in the practice of engineering.

Professional recognition

Deakin’s Bachelor of Electrical and Electronics Engineering (Honours) is accredited by Engineers Australia, which gives the degree international recognition, allowing graduates to practise as professional engineers in many countries around the world.

Career outcomes

With an international skills shortage in the engineering industry, Deakin graduates are in demand. As a graduate you can expect to gain employment in areas such as power generation distribution and transmission, electronic design, factory control, local government, public works and consulting.

Course structure

Bachelor of Electrical and Electronics Engineering (Honours)

Location: Melbourne Burwood Campus¹, Geelong Waurn Ponds Campus and Cloud Campus²

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

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

Deakin code: S461

ATAR score⁴: 74.3 N/A ⁵ 71.7

VTAC code: Melbourne Burwood Campus (1400514811), Geelong Waurn Ponds Campus (1400314811), Cloud Campus² (1400614811)

The Bachelor of Electrical and Electronics Engineering (Honours) consists of 32 credit points (cp) of study, including 26 core units (totalling 31cp) and one engineering elective unit (1cp).

Industry informed teaching

Project-Oriented Design-Based Learning (PODBL) in collaboration with industry is a key feature of our engineering courses. This new, innovative teaching methodology means that practical learning experiences are woven throughout the duration of our engineering courses.

¹ The first year is available at all three campuses. Students undertaking first year at the Melbourne Burwood Campus can choose to complete their course requirements either at the Geelong Waurn 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 Waurn Ponds Campus.

³ Trimester 2 intake only available at Waurn Ponds (Geelong) and Cloud Campus.

⁴ Lowest selection rank of an applicant to which an offer was made in 2019.

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.
World-class facilities

Engineering students at Deakin will use world-class facilities located within the Centre for Advanced Design in Engineering Training (CADET) building at the Geelong Waurn Ponds Campus and the Institute for Intelligent Systems Research and Innovation (IISRI). CADET features over $8 million worth of teaching equipment and cutting-edge technologies, including one of the two largest 3D printers in the southern hemisphere, specialist aids and high-end equipment enabling you to be creative and come up with innovative solutions. Students will also have access to a BMW Microgrid facility and state-of-the-art Visualisation and Control Centre.

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/engineering/cadet

Unique learning experiences

Deakin and AusNet Services are establishing a 7.25 megawatt smart microgrid, including a solar generation farm, a 1 megawatt battery storage capacity and an integrated research and visualisation centre to be completed in 2019. This $30 million project will give our engineering students a unique environment to develop and test solutions at an industrial scale. The control room will be based within CADET and the smart grid will be built at Deakin’s Geelong Waurn Ponds Campus (and will power the campus) both accessible to students throughout their studies.

Interested in applying?

Entry requirements

Entry for applicants with recent secondary education (previous three years) will be based on their performance in the Victorian Certificate of Education (VCE) or its equivalent, 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 (in 2019), applications 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, you can apply directly to Deakin for Trimester 1 if you’re not currently enrolled in Year 12 and you haven’t submitted a VTAC application (so long as you’re just applying for one course).

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