Create the smart software and systems of the future. Future-proof your career – drive digital transformation as an innovative software engineer.

As a software engineering student at Deakin, you will acquire specialised skills in robotics, cyber-physical systems and the internet-of-things. Upon graduation you will be well-equipped to find work developing and implementing state-of-the-art smart systems or frameworks into various existing industries such as health, fitness and travel.

Course overview

Deakin’s Bachelor of Software Engineering (Honours) is an innovative course focusing on software engineering, cyber-physical systems, the internet-of-things (IoT) and robotics applications to produce sought-after graduates who will create the technologies of the future.

The rapid advancement of sensing and computing hardware supporting smart, connected devices is driving growing demand for software engineers who can move beyond traditional technologies such as web and database systems.

This degree positions you to operate at the intersection of software engineering and new technology advances. You will build the smart systems that integrate robotics, internet-of-things and machine learning.

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 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.

Please visit deakin.edu.au/sebe/wil to find out more information.

Software engineering meets robotics

Robotics and cyber-physical systems are a rapidly growing commercial technology sector, with products such as self-driving cars, fitness trackers and drones being launched in recent years. From Mars rovers, to smart homes and cities, robotic surgery and precision agriculture, software engineers combine software systems and embedded hardware to create solutions that fill a vital role in the development of smart and innovative technologies.

Your ideas and creativity will flourish in our state-of-the-art facilities, including Deakin’s $1.2 million Robotics and Internet of Things (RioT) Studio featuring a range of devices, robotics and drones.
The rapid development of small-scale, cheap and powerful sensing and computing devices has enabled revolutionary technology products that allow us to automate complex systems and processes, and to collect data that leads to a better understanding of and interaction with the environments in which we live and work.

Associate Professor Tim Wilkin
Associate Head of School (Student Learning)

Career opportunities
Deakin’s Bachelor of Software Engineering (Honours) has been designed in response to industry demand for innovative software engineers capable of designing and developing complex software systems for the modern world; where software not only needs to interact with other software systems and users, but also with the environment itself.

As a graduate of this course you will be well-equipped to find employment in diverse areas of software systems engineering that are increasing in both complexity and interaction with the physical world. You will be able to develop and implement state-of-the-art smart devices, systems and application frameworks for industries such as smart infrastructure, health, agriculture, manufacturing and transport.

You may pursue a career as a software engineer, software developer, embedded systems developer, robotics application developer, systems architect, software and business analyst, software and system tester, and other emerging roles in this fast-growing sector. Software engineers also work in specialist research roles.

Interested in applying?

Entry requirements

Entry for applicants with recent secondary education (previous three years) will be based on their performance in a 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 one of Maths: Mathematical Methods (any) or Maths: Specialist Mathematics.

Entry for applicants with previous Tertiary, VET, life or work experience will be based on their performance in:

- Prerequisites of English and mathematics as for year 12 school leavers (or equivalent).

Entry will be based on their performance in:

- 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.