Bachelor of Engineering (Electrical Engineering) (Honours)

2019
Undergraduate

Play a part in finding better ways to power the modern world by learning the processes behind the production and distribution of electricity.

Electrical engineering at RMIT is about more than just learning the theories behind the discipline, it's about being able to put those theories into practice in order to solve problems. You'll learn the skills necessary to make useful products and provide quality services by spending time on experiments in laboratory classes, and designing projects.

Throughout the program you'll learn to design, develop and supervise the manufacture, installation, operation and maintenance of electrical systems. You'll also work on systems for the generation, distribution, utilisation, and control of electric power and electronic systems used for a variety of domestic and industrial applications.

You'll develop high-level technical and design skills and focus on a specialist area such as energy conversion, power systems or high-voltage equipment.

Career outlook

Electrical engineers work on the systems for the generation, distribution, utilisation and control of electric power systems. They drive the transition to alternative and renewable energy sources.

After graduating you may work in areas of industry such as:

- power generation and distribution
- mining and resources
- industrial systems design
- consumer product design
- process control industries
- electrified transportation
- manufacturing
- automotive
- defence

Work opportunities are available in Australia and overseas, designing and supervising projects to implement new technologies in small and large organisations.

The leadership skills you learn from project work will also help prepare you for management roles.

Graduates have gone on to work at a range of organisations including: AusNet Services, United Energy, Beca, Schneider Electric, Greensync, Metro, Robert Bosch, Ford Australia and Woodside Energy.

Industry connections

You'll have opportunities to engage with industry from the beginning of your degree.

Through work placements, industry projects, internships, seminars and events, you'll be in contact with industry every step of the way.

You'll have the chance to do 12 weeks' work experience, research projects in collaboration with industry and the opportunity to work overseas with leading organisations.

Professional recognition

This program is fully accredited by Engineers Australia. Graduates of the program are eligible for graduate membership of Engineers Australia. Full membership as a professional engineer may be obtained after an appropriate period of professional practice.

Australia is one of 15 countries that are signatories to the International Engineering Alliance, also known as the Washington Accord, for professional engineers. The qualification of graduates from this degree is recognised in all countries that are signatories to the Accord.

International opportunities

RMIT encourages you to aspire to a global career, not just a local one, and as an engineering student you'll have a range of global opportunities.

Through partner organisations in Europe, Asia and the United States, the RMIT International Industry Experience and Research Program (RIIERP) offers workplace training and academic research placements of between six and 12 months.

There are also opportunities to study broad through Education Abroad.

Program snapshot

Program code: BH075

Duration

Full-time: 4 years

Location

City campus

Selection mode

ATAR (2018: 80.00)

How to apply

Semester 1: VTAC
vtac.edu.au

Semester 2: Direct to RMIT
rmit.edu.au/programs/apply/direct

Fees

For local fee information:
rmit.edu.au/programs/fees

Contact

Info Corner
330 Swanston Street
(cnr La Trobe Street)
Melbourne VIC 3000
Tel. +61 3 9925 2260

rmit.edu.au/programs/bh075

RMIT UNIVERSITY

Program structure

Years 1 and 2

You'll learn the fundamental ideas and activities behind electrical engineering with the essential mathematics and physics.

All engineering students will also study an Introduction to Engineering course, incorporating a humanitarian-focused Engineers Without Borders Challenge. You'll have the opportunity to extend this aspect of your studies by completing an Engineers Without Borders elective, enabling you to experience humanitarian engineering first-hand. Your project work will develop communication, teamwork and leadership skills.

Years 3 and 4

You'll develop high-level technical and design skills and focus on a specialist area such as energy conversion, power systems or high-voltage equipment.

Your major team and individual design projects will further hone your communication, management and teamwork skills. As these projects are similar to ones practising engineers work on, you'll graduate job-ready.

Your final year (capstone) project will develop and reinforce the skills and knowledge you need - as defined by Engineers Australia - to commence your professional engineering career.

You'll also complete a work-integrated learning (industry experience) elective in Year 2, 3 or 4.

Program elective examples:

- Communication Engineering
- Industrial Automation
- Power Electronic Converters
- Power Systems
- Real Time Control Systems
- Renewable Electrical Energy Systems
- Switched Mode Power Supplies
- Variable Speed Drives

Year 1	Engineering Mathematics A	Engineering Computing 1	Introduction to Professional Engineering Practice	Physics 1
	Circuit Theory	Digital Systems Design 1	Electrical Engineering Analysis	University elective
Year 2	Mathematics for ECE	Electrical Engineering 1	Signals and Systems 1	Electronics
	Introduction to Embedded Systems	Engineering Design 2	Program elective	University elective
Year 3	Engineering Design 3A	Power System Analysis and Control	Electrical Plant	Electrical Energy Conversion
	Engineering Design 3B	Control Systems	Research Methods for Engineers	Program elective
Year 4	Engineering Capstone Project Part A	Program elective	Program elective	Program elective
	Engineering Capstone Project Part B	Program elective	Program elective	Program elective

Compulsory courses | Program electives | University electives

Please note: This is an example of the program structure. Courses may change and may not be available each semester.