Advance your career in electrical and electronic engineering by developing expertise in the analysis, design, implementation and operation of electrical and electronic devices, systems and services.

This program will equip you to work at the cutting-edge of developments in:
- electrical energy generation and distribution
- automation
- control
- instrumentation
- communication
- computing technologies
- electronic circuit design and fabrication.

You will develop expertise in the analysis, design, implementation and operation of electrical and electronic devices, systems and services.

You will also enhance your professional skills in research, problem-solving, communication, teamwork and leadership.

Graduates can find work in a range of industries including electrical engineering, electronic engineering, power generation and distribution, aerospace, automotive, computer, communication, manufacturing, resource, defence and primary.

Learning and teaching
RMIT offers a variety of learning and teaching approaches including lectures, seminars, workshops, presentations, group discussions and syndicate work.

You will have access to online resources through the myRMIT student portal.

Ongoing assessment throughout the semester includes examinations, essays, reports, oral classes, presentations, group projects, laboratory projects and practical assignments.

Classes are taught by experts in their fields. There is a strong emphasis on laboratory work and professional engineering projects to put theory into practice and to enhance skills in research, problem-solving, communication, teamwork and leadership.

Industry connections
RMIT University is committed to providing you with an education that strongly links formal learning with professional practice.

Industry plays a vital role in the development, delivery and assessment of the program through membership of the Program Advisory Committee (PAC), which comprises industry representatives, academic staff and alumni.

There are also extensive links with industry, particularly through laboratories that incorporate work-integrated learning through research projects, consulting and industry-sponsored student design projects.

Notable industry links for this program are:
- Dyne Industries Pty Ltd
- API (The Australian Power Institute)
- AEMO (Australian Energy Market Operator)
- United Energy
- SEW-Eurodrive
- SP Ausnet
- ANCA (Australian Numerical Controls and Automation)
- Wilson Transformer Company
- Jemena
- Schneider Electric
- Telstra
- Engineers Australia
- IEEE (Institute of Electrical and Electronics Engineers)
- IET (Institution of Engineering and Technology).
Career outlook
In the private sector, graduates work in the design, manufacture and supply of engineering devices, systems and services. They work as technical experts, technical or business managers or executive officers.

In the public sector, graduates develop essential services for the community in areas such as telecommunications, networks, energy, transportation, security, defence, health, education, emergency services and environment protection.

Graduates may also establish their own businesses in local and global markets, or undertake higher studies by research.

Professional recognition
This program is provisionally accredited by Engineers Australia.

This program will be submitted for full accreditation by Engineers Australia as soon as it is feasible to do so within the accreditation timelines set by Engineers Australia.

Program structure
This program consists of 192 credit points.

In addition to compulsory core courses, you will select technical electives in electrical, electronic, telecommunication, network and computer engineering to match your career goals.

In both years of the program you will undertake major engineering projects to apply your technical skills and develop communication, teamwork and project management skills.

You will also complete 12 weeks of professional engineering experience to develop the graduate capabilities required by Engineers Australia.

Year 1
Complete the following core courses:
- Professional Engineering Project Part A
- Professional Engineering Project Part B
- Project Preparation, Planning and Problem Solving.

And four of the following courses:
- Introduction to Statistics
- Circuit and System Simulation (PG)
- Digital System Design (PG)
- Digital Signal Processing
- Mobile and Personal Communication Systems Engineering (PG)
- Network Engineering
- Industrial Automation
- Electrical Energy Conversion

And
- one program elective (see list).

Year 2
Option A: complete the following courses:
- Professional Engineering Advanced Project Part A
- Professional Engineering Advanced Project Part B
- Professional Experience Postgraduate
- five program electives (see list)

OR
Option B: complete the following courses:
- Professional Experience Postgraduate
- three program electives (see list)

And complete 48 credit points from the following:
- Research Project (48 credit points)
- Research Project Part 1 (24 credit points)
- Research Project Part 2 (24 credit points)

Elective list
- Digital Signal Processing
- Optical Fibre Systems and Networks (PG)
- Antennas for Mobile and Satellite Communications (PG)
- Optical Fibre Technology (PG)
- Satellite Communication Systems Engineering (PG)
- Mobile and Personal Communication Systems Engineering (PG)
- Network Access Systems (PG)
- Network Services and Internet Applications (PG)
- Image Systems Engineering
- Real Time Systems Design
- Advanced Control Systems (PG)
- Audio Engineering (PG)
- Sensors and Measurement Technologies
- Circuit and System Simulation (PG)
- Design With Hardware Description Languages
- Integrated Circuit Design (PG)
- EDA Tools and Design Methodologies (PG)
- Digital System Design (PG)
- Micro-Nano Systems, MEMS and NEMS
- Semiconductor Device Fabrication (PG)
- Project Management and Entrepreneurship (PG)
- Electronic Materials
- Recent Advances in Micro-Nano Engineering
- Semiconductor Device Physics
- Real Time Estimation and Control
- Network Engineering
- Enterprise and Cloud Networks
- Network Management and Software Defined Networks
- RF and Microwave Circuits
- Radar Systems
- Computer Robotics Control
- Network Design and Performance
- Bioelectromagnetism
- Renewable Electrical Energy Systems
- Protection and High Voltage Engineering
- Electrical Energy Conversion
- Variable Speed Drives
- Power System Analysis and Control
- Wireless Sensor Networks
- Statistical Process Control and Quality Assurance
- Advanced Power Systems
- Electrical Transport Engineering
- Introduction to Electrical Building Design
- Industrial Automation
- Power Electronic Converters
- Lab-on-a-Chip, Biomedical Devices and Bio-Nano Engineering
- Electronic Systems for Automotive Applications
- Systematic and Creative Problem Solving – Level 1
- Extended Professional Engineering Project 1
- Extended Professional Engineering Project 2
- Mobile Computing
- Engineering Project Design and Management
- Computer and Network Security
Successful completion of an Australian bachelor degree with a GPA of at least 2.0 out of 4.0 in engineering (computer, electronic, telecommunications, electrical, communication, network) or equivalent. International qualifications are assessed according to the Australian Qualifications Framework (AQF).

**Entry requirements**

**Credit and exemptions**

If you have successfully completed one of the following qualifications majoring in engineering you will be eligible for exemptions as follows:

<table>
<thead>
<tr>
<th>Qualification level</th>
<th>Exemptions</th>
<th>Remaining program duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate certificate in the same discipline</td>
<td>Up to 48 credit points (equivalent to one semester of full-time study)</td>
<td>144 credit points (equivalent to three semesters of full-time study)</td>
</tr>
<tr>
<td>Graduate diploma in the same discipline</td>
<td>Up to 96 credit points (equivalent to two semesters of full-time study)</td>
<td>96 credit points (equivalent to two semesters of full-time study)</td>
</tr>
</tbody>
</table>

Graduates of this postgraduate program can apply for higher studies by research.

This information is designed for Australian and New Zealand citizens and permanent residents of Australia.

Disclaimer: Every effort has been made to ensure the information contained in this publication is accurate and current at the date of printing. For the most up-to-date information, please refer to the RMIT University website before lodging your application. Visit [www.rmit.edu.au](http://www.rmit.edu.au).