Bachelor of Engineering
(Computer and Network Engineering)
(Honours)

Learn about the design and application of programmable and reconfigurable devices and computer-based systems.

At RMIT, computer and network engineering are taught together with a focus on Internet of computerised, smart and intelligent Things (IoT), so you learn the fundamental ideas related to both fields. You can choose to specialise in either area to ensure that you graduate work-ready.

You’ll gain the knowledge and skills to find better solutions to challenges in design, construction and maintenance of software and hardware components of computing and computer-controlled devices, equipment and systems. This could include communication networks and automation of electrical and electronic systems; audio and visual information acquisition, processing and communications; human-machine interaction, industrial or medical instrumentation and monitoring; and provision of security for computer systems and networks.

In computer engineering, you’ll learn how to create new opportunities for businesses by driving new technologies, and solutions to make businesses more productive and competitive. From designing and developing new microcontroller-based products and systems, to enhancing functionalities of those that currently exist there are plenty of possibilities in a world of ever-changing market needs and consumer demands.

During network engineering studies you’ll learn about the design, implementation and maintenance of digital communication networks. In this program, network engineering looks at technology, audio and visual communications over wired and wireless networks, network management and software defined networks, optimising network performance and network security.

Industry connections
As an RMIT engineering student, 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.

Career outlook
Computer and network engineers work in industry and business to design and build computer and communication networks. You may also be sought after by universities and research organisations to improve computer technologies.

Job opportunities exist with governments to improve defence, security and emergency services. You’ll also have the skills to run your own computer or network services business.

Within their organisations, graduates take on roles such as a network engineer or computer engineer.

Graduates have gone on to work at a range of organisations including Telstra, Optus, Cisco and Huawei.

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 abroad through Education Abroad.
Program structure

Years 1 and 2

The first two years of the program will introduce you to the basic principles of computer and network engineering. You’ll also study mathematics and physics – critical disciplines for engineers.

Through project work, you’ll gain knowledge of engineering methods, teamwork, communication and leadership skills and learn how to be an effective leader.

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.

Years 3 and 4

You’ll delve deeper into your specialist area. There are five compulsory courses in year three plus electives from computer and/or network engineering.

By completing individual and team-based projects that mirror the work of practising engineers, you’ll graduate industry-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.

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<td>Engineering Design 2</td>
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<td>Year 3</td>
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Please note: This is an example of the program structure. Courses may change and may not be available each semester.