

Advanced Diploma of Electronics and Communications Engineering

2019

Vocational Education

Get started in a career that will see you design and develop electronic products and processes that make a difference.

In this program you'll develop skills to design, validate and evaluate electronics and communication equipment as well as systems.

You'll also be able to manage risk; estimate and manage projects; and provide technical and sales advice. In addition you will learn skills in programmable gate array technologies, circuit simulation, printed circuit board design, digital and analogue systems and applications, amplifiers, analogue integrated circuit design, communication systems, mobile phones, global positioning systems (GPS), microwave links, embedded controllers, AM/FM, computer programming, engineering software and project management, and computational solutions.

Professional recognition

This program is accredited by Engineers Australia. Graduates of the program will be eligible for membership of Engineers Australia at Engineering Associate level.

Australia is a signatory to the International Engineering Alliance, also known as the Dublin Accord, for engineering technicians. Graduates of the program will be recognised in all countries that are signatories to the accord.

Industry connections

RMIT has a strong Industry Advisory Committee (IAC), which links the program and industry. The IAC includes representatives from local computer systems industries.

The committee meets twice yearly and provides feedback on our programs to ensure that they reflect the changing needs of industry.

You'll also be able to connect with industry representatives through participation in seminars, marketing events, industry awards and scholarships.

Career outlook

As a graduate of this program your skills will be applicable to a wide range of business,

manufacturing and operational occupations where application of knowledge in electronics and communications underpins the business operations.

You may work in a range of industries/fields, such as manufacturing; telecommunications; radio communications; electronics equipment and services; security systems; scientific instruments and sales; and administering and upgrading electronics, communications equipment and facilities in small, medium or large-sized enterprises.

Pathways

Graduates who achieve a grade point average (GPA) of at least 3.0 out of 4.0 may be eligible to receive one-and-a-half years credit (equivalent to 144 credits) to the following programs if successful in gaining a place:

- Bachelor of Engineering (Electronic and Communication Engineering)(Honours)
- Bachelor of Engineering (Electrical and Electronic Engineering)(Honours)

The completion of the Certificate IV in Tertiary Preparation engineering stream may provide a pathway into this program (certain criteria must be met).

Program snapshot

Program code: C6122
National code: UEE60211

Duration

Full-time: 2 years
Part-time may be available.

Location

City campus

Selection mode

ATAR: Not published

How to apply

Semester 1: VTAC
vtac.edu.au, or
Direct to RMIT (conditions apply)
rmit.edu.au/programs/apply/direct

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/c6122

Program structure

This qualification requires the completion of a total of 2160 weighting points.
Please see the website for unit points.

Develop design briefs for electrotechnology projects (UEENEEE015B)	Assemble electronic components (UEENEEA101A)	Solve fundamental electronic communications system problems (UEENEEH146A)	Design embedded controller control systems (UEENEE152A)
Participate in development and follow a personal competency development plan (UEENEEE038B)	Use software (UEENEE104A)	Troubleshoot microcontroller based hardware systems (UEENEEH166A)	Use advanced computational processes to provide solutions to energy sector engineering problems (UEENEEE127A)
Contribute to risk management in electrotechnology systems (UEENEEE078B)	Fabricate, assemble and dismantle utilities industry components (UEENEEE102A)	Solve problems in basic electronic circuits (UEENEEH169A)	Solve electrotechnical engineering problems (UEENEEE129A)
Apply Occupational Health and Safety regulations, codes and practices in the workplace (UEENEEE101A)	Solve problems in d.c. circuits (UEENEEE104A)	Troubleshoot communication systems (UEENEEH172A)	Plan large electronic projects (UEENEEH160A)
Implement and monitor energy sector OHS policies and procedures (UEENEEE117A)	Repairs basic electronic apparatus faults by replacement of components (UEENEEH102A)	Use computer applications relevant to a workplace (UEENEE101A)	Modify digital signal processing (DSP) based sub-systems (UEENEEH184A)
Document and apply measures to control OHS risks associated with electrotechnology work (UEENEEE137A)	Troubleshoot digital sub-systems (UEENEEH112A)	Evaluate and modify object oriented code programs (UEENEE103A)	Provide Gate Array solutions for complex electronics systems (UEENEEH189A)
Manage computer systems/ electronics projects (UEENEEH141A)	Troubleshoot amplifiers in an electronic apparatus (UEENEEH113A)	Provide solutions to basic engineering computational problems (UEENEEE126A)	Manage risk in electrotechnology activities (UEENEEE011C)
Commission electronics and communications systems (UEENEEH167A)	Troubleshoot resonance circuits in an electronic apparatus (UEENEEH114A)	Develop engineering solutions to analogue electronic problems (UEENEEH145A)	Apply material science to solving electrotechnology engineering problems (UEENEEE081A)
Modify - redesign of electronics and communications systems (UEENEEH168A)	Develop software solutions for microcontroller based systems (UEENEEH115A)	Design and develop advanced digital systems (UEENEEH148A)	Apply physics to solving electrotechnology engineering problems (UEENEEE082A)
Design and develop electronics - computer systems projects (UEENEEH188A)	Find and repair microwave amplifier section faults in electronic apparatus (UEENEEH116A)	Design electronic printed circuit boards (UEENEEH181A)	
Develop strategies to address environmental and sustainability issues in the energy sector (UEENEEK132A)	Troubleshoot basic amplifier circuits (UEENEEH139A)	Develop engineering solutions to RF amplifiers problems (UEENEEH182A)	

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

-  Core Units - Select all 11
-  Group B Qualification Elective Units - Select all 15
-  Pre-requisite Units - Select 1
-  Group C Qualification Elective Units - Select 1
-  Group D Elective Units - Select 5
-  Group E Elective Units - Select 9