

# Advanced Diploma of Engineering Technology - Electrical

2019

Vocational Education

In this program, you'll develop skills to design, validate and evaluate electrical equipment and systems as well as provide technical advice and sales.

Electrical engineers design and maintain electrical systems to improve the production and distribution of energy to all levels of society. As we increasingly depend on electrical and electronic devices in modern society, electrical engineers are in high demand.

Electrical engineers design and maintain electrical systems in markets and application areas ranging from aerospace, power utilities, mining, oil and gas, wind and solar food and beverages, pharmaceuticals, data centres, transport and logistics, and many others.

You'll gain skills and knowledge in electrical design, programmable logic controllers (PLCs), supervisory control and data acquisition (SCADA) systems, industrial data networking, and motor control. Following this program, you'll be qualified to work in the electrical industry.

## 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 you may become responsible for electrical and control support and administering and upgrading electrical facilities in small, medium or large-sized enterprises.

You'll gain skills in the installation, maintenance and administration of electrical and automation infrastructure. These skills will be applicable to a wide range of business, manufacturing and operational occupations where application of knowledge in electrical technology underpins the business operations.

## 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 program if successful in gaining a place:

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

## Program snapshot

Program code: C6120  
National code: UEE62111

## Duration

Full-time: 2 years  
Part-time is available through selected day-time classes.

## Location

City campus

## Selection mode

ATAR: Not published

## How to apply

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

Semester 2: Direct to RMIT  
[rmit.edu.au/programs/apply/direct](http://rmit.edu.au/programs/apply/direct)

## Fees

For local fee information:  
[rmit.edu.au/programs/fees](http://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/c6120](http://rmit.edu.au/programs/c6120)

## Program structure

Use software (UEENEE104A)	Use drawings, diagrams, schedules, standards, codes and specifications (UEENEE107A)	Terminate cables, cords and accessories for low voltage circuits (UEENEE106A)	Develop, enter and verify discrete control programs for programmable controllers (UEENEE150A)
Manage risk in electrotechnology activities (UEENEE011C)	Implement and monitor energy sector OHS policies and procedures (UEENEE117A)	Select wiring systems and cables for low voltage general electrical installations (UEENEE107A)	Develop, enter and verify word and analogue control programs for programmable logic controllers. (UEENEE151A)
Develop design briefs for electrotechnology projects (UEENEE015B)	Compile and produce an energy sector detailed report (UEENEE124A)	Provide engineering solutions to problems in complex polyphase power circuits (UEENEE149A)	Develop, enter and verify programs in Supervisory Control and Data Acquisition systems (UEENEE152A)
Write specifications for electrical engineering projects (UEENEE071B)	Provide engineering solutions for problems in complex multiple path circuits (UEENEE125A)	Manage large electrical projects (UEENEE169A)	Configure and maintain industrial control system networks (UEENEE157A)
Apply industry and community standards to engineering activities (UEENEE080A)	Provide solutions to basic engineering computational problems (UEENEE126A)	Plan large electrical projects (UEENEE170A)	Use advanced computational processes to provide solutions to energy sector engineering problems (UEENEE127A)
Apply material science to solving electrotechnology engineering problems (UEENEE081A)	Document and apply measures to control OHS risks associated with electrotechnology work (UEENEE137A)	Develop strategies to address environmental and sustainability issues in the energy sector (UEENEE132A)	Develop engineering solutions for induction machine and control problems (UEENEE145A)
Apply physics to solving electrotechnology engineering problems (UEENEE082A)	Solve problems in single and three phase low voltage machines (UEENEE006A)	Trouble-shoot and repair faults in low voltage electrical apparatus and circuits (UEENEE108A)	Design and use advanced programming tools PC networks and HMI Interfacing (UEENEE154A)
Establish and follow a competency development plan in an electrotechnology engineering discipline (UEENEE083A)	Solve problems in single and three phase low voltage electrical apparatus and circuits (UEENEE033A)	Set up industrial field control devices (UEENEE119A)	Fix and secure electrotechnology equipment (UEENEE105A)
Apply Occupational Health and Safety regulations, codes and practices in the workplace (UEENEE101A)	Arrange circuits, control and protection for general electrical installations (UEENEE063A)	Provide solutions to problems in industrial control systems (UEENEE120A)	
Fabricate, assemble and dismantle utilities industry components (UEENEE102A)	Solve problems in electromagnetic devices and related circuits (UEENEE101A)	Fault find and repair analogue circuits and components in electronic control systems (UEENEE124A)	
Solve problems in d.c. circuits (UEENEE104A)	Solve problems in low voltage a.c. circuits (UEENEE102A)	Diagnose and rectify faults in digital controls systems (UEENEE139A)	

Core Units - Select all 28

Group B Elective Units - Select 1

Group E Elective Units - Select all 3

Group A Elective Units - Select all 5

Group C & D Elective Units - Select 2

Prerequisite Unit - Select 1

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

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). RMIT University CRICOS Provider Code: 00122A. RMIT Registered Training Organisation code: 3046. Prepared June 2018.