

22499VIC Certificate II in Electrotechnology (Pre-vocational)



This course prepares students to gain an apprenticeship or other employment in the electrotechnology industry. It covers the fundamentals of electrical, telecommunication, refrigeration and air conditioning systems as well as workshop experience in fabrication and assembly techniques, wiring, cabling, basic installation skills and use of test equipment. Workplace safety and first aid training are also included. It provides an overview of the industry, employment opportunities and training pathways.

The training is mainly project based and gives industry relevant hands-on experience in a realistic simulated environment. The course gives you the basic skills to make you job ready. You will learn to use basic hand and power tools and equipment an electrician/technician uses and how to read circuit diagrams, take electrical measurements and perform electrical calculations.

ACTIVITIES/TASKS

The theoretical and practical training is linked directly to the work electrotechnology related technicians undertake. The course includes:

- Basic electrical/electronic theory
- Renewable energy concepts and projects (Solar and Wind)
- Electric motor theory and practice (Motor control)
- Data and network cabling
- Testing instruments
- Air-conditioning basics

UNITS OF COMPETENCY

Year 1 (Core)	(E) = Elective	Year 2 (Core)	
CPCCWHS1001	Prepare to work safely in the construction industry	HLTAID003*	Provide first aid
UEENEEE101A	Apply occupational health and safety regulations, codes and practices in the workplace	VU22333	Perform intermediate engineering computations
UEENEEE102A	Fabricate, assemble and dismantle utilities industry components	UEENEEJ104A	Establish the basic operating conditions of air conditioning system
UEENEEE103A	Solve problems in ELV single path circuits	VU21544	Install a sustainable extra low voltage energy power system
UEENEEE105A	Fix and secure electrotechnology equipment	VU22672	Carry out basic electrotechnology project
VU22670	Provide an overview of the electrotechnology industry	(E)	
VU22671	Use test instruments in the electrotechnology industry	(E)	
VU22673	Carry out basic network cabling for extra low voltage (ELV) equipment and devices	UEENEEE141A	Use of routine equipment plant technologies in an energy sector environment
	(E)	(E)	(E)

Year 1 (Electives)**Year 2 (Electives)**

UEENEEP024A Attach cords and plugs to electrical equipment for connection to a single phase 230 volt supply (E)

*Students will be enrolled for the first aid unit with 1 SDO TRAINING (RTO Number 41558) and they will deliver the certificates. Their trainers will deliver the unit at NCAT. Students must be deemed competent in all units of competency listed in order to gain the certificate.

LENGTH OF COURSE

The course can be completed either as a NCAT Pre-apprenticeship student over one year or as a year 10, VCAL or VCE student for half day per week over two years. External students enrol through their home school and attend for half day per week over two years.

ELIGIBILITY & PREREQUISITES

It is recommended students have a minimum sound achievement of Year 10 Maths and English or equivalent and an aptitude for practical work. If you have any individual needs, please contact us to discuss these.

ASSESSMENT

A combination of project based practical tasks and job briefs assessed by observation and questioning and written tasks and theory tests are all assessed using set criteria. Students are given a fair and adequate assessment process that includes multiple opportunities to demonstrate competency. Students are required to undertake a minimum of 80 hours of Structured Workplace Learning.

BENEFITS OF TRAINING

This course gives you skills and knowledge which can impress potential employers and help you get an apprenticeship. Completing the program may provide credit towards some units in the Certificate III in Electrotechnology Electrician giving you exemptions from units studied in the first year of an apprenticeship.

APPLICATION & ENROLMENT PROCESS

Students wanting to study full time at NCAT must arrange an interview phone 9478 1333. External students must complete two forms.

1. An Application Form given from home school for approval at the home school level.
 2. An NCAT RTO VET Enrolment Form available from the home school VET coordinator or at ncat.vic.edu.au or the Northern Melbourne VET Cluster website nmvc.vic.edu.au
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PATHWAYS

The electrotechnology industry is a highly technical industry, changing and growing at a rapid rate as technology advances in fields such as data communication, home automation, intelligent systems for industrial and facilities management and renewable/sustainable energy systems.

The most common pathway from this course is to the Certificate III in Electrotechnology Electrician. There are Certificate IIIs in Electrical Machine Repair and Electronic and Communications. There are a huge range of specialisations at Certificate IV level including systems electrician, instrumentation, air conditioning split systems, data and voice communications, rail signaling and communications, network systems, lift systems, renewable energy and fire protection control systems. Search electrotechnology on training.gov.au to see the Diploma and Advanced Diplomas available.

POLICIES

The NCAT VET and General Student Handbook on our website contains policies and procedures for access, equity, privacy, refunds, student conduct, recognition processes, access to records, complaints & appeals.

For safety reasons there is a NCAT electrotechnology uniform which is not included in the materials cost.

Parents will receive a letter outlining specific details of the uniform and the supplier.
