

22499VIC Certificate II in Electrotechnology (Pre-vocational)*



This program is for students who commenced first year in 2024. This qualification is subject to change for 2025.

This course covers basic skills to make students job ready and helps gain an apprenticeship in the industry. It covers the fundamentals of electrical, telecommunication and air conditioning systems and workshop experience in fabrication and assembly techniques, wiring, cabling, basic installation skills and use of test equipment. The training is mainly project based and gives relevant hands-on experience in a realistic simulated environment. Workplace safety and first aid training are also included. It provides an overview of the industry, employment opportunities and training pathways.

ACTIVITIES/TASKS

Students learn to use basic hand and power tools and equipment used by an electrician, how to read circuit diagrams, take electrical measurements and perform electrical calculations. Also included:

- 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)	(E) = Elective
CPCCWHS1001	Prepare to work safely in the construction industry	HLTAID011*	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		
VU22671	Use test instruments in the electrotechnology industry		
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)
UEENEEP024A	Attach cords and plugs to electrical equipment for connection to a single phase 230 volt supply (E)		

*The first aid unit is delivered by 1 SDO TRAINING (RTO Number 41558) at NCAT. They will deliver the certificates. Students must be deemed competent in all units of competency listed to gain the certificate.

LENGTH OF COURSE

This program is delivered to students as a VET in Schools Vocational Major (VM) program for Year 10 or Year 11 commencements. Internal NCAT students can complete the program as a NCAT Pre-apprenticeship student over one year.

External VCE VM students attend for a half day per week (Feb-Nov) over two years and enrol through their home school.

ELIGIBILITY & PREREQUISITES

Students must have a minimum sound achievement of Year 10 Maths and English and an aptitude for practical work. If you have individual needs, please contact the college 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 changing and growing at a rapid rate with technology advances in fields such as data communication, home automation, intelligent systems for industrial and facilities management and renewable/sustainable energy systems.

The course is a pathway to the Certificate III in Electrotechnology Electrician. Other Certificate IIIs include 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.
