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

NATIONALLY RECOGNISED
TRAINING

Course Information Brochure

Description of Course
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/task
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

Assessment
Assessment is conducted using a combination of project based practical tasks, theory tests and job briefs. Student competence will be judged by a qualified assessor using all of these tasks. Students are given a fair and adequate assessment process with multiple opportunities to demonstrate competency.

Eligibility and 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.

First Year
Core

CPCCWHS1001	Prepare to work safely in the construction industry
UEENEEE101A	Apply occupational health and safety regulations, codes and practices in the workplace
UEENEEE102A	Fabricate, assemble and dismantle utilities industry components
UEENEEE103A	Solve problems in ELV single path circuits
UEENEEE105A	Fix and secure electrotechnology equipment
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

Elective

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

Second Year
Core
HLTAID003   Provide first aid **
VU22333   Perform intermediate engineering computations
UEENEEJ104A   Establish the basic operating conditions of air conditioning system
VU21544   Install a sustainable extra low voltage energy power system
VU22672   Carry out basic electrotechnology project
Elective
UEENEEE141A   Use of routine equipment plant technologies in an energy sector environment

**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 of the units of competency listed in order to gain the certificate.

Benefits of this 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.

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 signalling and communications, network systems, lift systems, renewable energy and fire protection control systems. Search *electrotechnology* on trainging.gov.au to see the Diploma and Advanced Diplomas available.

Uniform requirement
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.

Length of the Course
Students completing this as part of their VCAL or VCE program will complete the program over two years. Internal NCAT Pre-apprenticeship students course is completed in one year.

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 https://ncat.vic.edu.au/ or the Northern Melbourne VET Cluster website https://nmvc.vic.edu.au/

Policies
For details regarding Access, Equity, Privacy Policy, Refunds Policy, Student Conduct, Recognition Processes, Access to Records, Complaints & Appeals Policy etc. please see the VET Student Handbook Available on the NCAT website.

RTO Number 6736