MEM31215 Certificate III in Engineering - Industrial Electrician

National ID: MEM31215 | State ID: AWG6

About this course

Get qualified as an industrial electrician.

The Certificate III in Engineering - Industrial must be completed as part of an apprenticeship, and upon successful completion, allows participants to work as an industrial electrician or electrical regulator. Apprentices will learn through a combination of on-the-job employment and block training at North Regional TAFE.

Throughout this course, participants will learn how to select, set up and install, test, fault-find, repair and maintain electrical systems and equipment in buildings and industrial environments, including oil/gas installations, mine sites, processing plants and the like.

Participants will learn how to perform some of the following tasks:

- Terminate and test electrical wiring
- Select appropriate cabling and circuit protection devices
- Install low voltage cabling and fit-off accessories
- Inspect, test and verify electrical installations
- Fault-find and troubleshoot
- Perform engineering measurements and computations
- Apply safety practices, procedures and compliance standards

JOBS & SKILLS WA

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- Solve problems in d.c. and low voltage a.c. circuits

The qualification covers the Essential Performance Capabilities as required by electrical regulators and includes a capstone assessment.

Overview

Available all year, 2019

Broome Campus - Qualification details

Duration: **3 Years**

When: **Available all year**

How: **Face-to-face block delivery**
Face-to-face classroom delivery
Mixed mode
Part-time

Units

This is a suggested study plan. North Regional TAFE offers a variety of alternative units, and packaging rules apply to these selections. Your unit options will be discussed with you prior to enrolment.

Students must successfully complete 32 core and elective units totalling 6 points to be awarded this qualification.

Core

National ID	Unit Title
MEM10016	Terminate and test electrical wiring and accessories
MEM10018	Select cable types and sizes to suit loads and electrical installation environment
MEM10019	Select circuit protection devices by type and rating, fit to switchboards and install earthing
MEM10020	Install low voltage cabling and fit-off accessories, appliances and equipment
MEM10021	Inspect, test and verify electrical installations

National ID	Unit Title
MEM10022	Commission and decommission high and low voltage equipment or installations
MEM10023	Design and connect control switching of circuits for building services and industrial equipment
MEM10024	Install and troubleshoot luminaires and ancillary equipment
MEM10025	Undertake a capstone assessment
MEM12023A	Perform engineering measurements
MEM12024A	Perform computations
MEM13014A	Apply principles of occupational health and safety in the work environment
MEM13017	Apply safety practices, procedures and compliance standards associated with licensed electrical work
MEM14004A	Plan to undertake a routine task
MEM14005A	Plan a complete activity
MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures
MEM16006A	Organise and communicate information
MEM16007A	Work with others in a manufacturing, engineering or related environment
MEM16008A	Interact with computing technology
MEM17003A	Assist in the provision of on the job training
MEM18001C	Use hand tools
MEM18100	Fault-find, test and rectify AC machines and circuits
MEM18102	Fault-find, test and rectify single and three-phase transformers
MEM18103	Fault-find, test and rectify electrical circuits and equipment

National ID	Unit Title
MEM18104	Dismantle, replace and assemble electrical components and equipment
MSMENV272	Participate in environmentally sustainable work practices
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace
UEENEEE104A	Solve problems in d.c. circuits
UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications
UEENEEG101A	Solve problems in electromagnetic devices and related circuits
UEENEEG102A	Solve problems in low voltage a.c. circuits

Elective

National ID	Unit Title
MEM05001B	Perform manual soldering/desoldering - electrical/electronic components
MEM05012C	Perform routine manual metal arc welding
MEM07032B	Use workshop machines for basic operations

Study pathway

Certificate IV in Engineering

Job opportunities

- Industrial electrician
- Electrical regulator

Fees and charges

North Regional TAFE's **indicative fees for 2019** are available here. These fees are indicative for local students enrolling full-time in Government-funded courses. Fees are calculated based on individual circumstances at the time of enrolment. Concessions for eligible certificate I - IV level courses, annual fee caps and other charges may apply.

For more information, please click here.

VET Student Loans
VET Student Loans is an income contingent loan support available to eligible students studying a diploma level or above qualification. For more information, please click here.

International student fees
Fees, charges, available locations, applications, and enrolment procedures for international students are different to those applicable to local students. Please visit the TAFE International WA website to confirm available courses and fees. Tuition fees are paid through TIWA.

Please note, fees are subject to change.