# **AUR30325** Certificate III in Automotive Electrical Technology

### **Qualification Description**

This qualification reflects the role of individuals who service, diagnose and repair electrical systems and components in vehicles in the automotive electrical service and repair industry.

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

#### **Entry Requirements**

Nil.

### **Packaging Rules**

Total number of units = 32

21 core units, plus

11 elective units, of which:

- all 11 units may be from the elective units listed below
- up to 6 units may be from a Certificate II qualification or above in this Training Package or another endorsed Training Package or accredited course.

Elective units must be relevant to the work environment and the qualification, maintain the overall integrity of the AQF alignment, not duplicate the outcome of another unit for the qualification, and contribute to a valid vocational outcome.

Core Units

AURAEA002 Follow environmental and sustainability best practice in an automotive workplace

AURASA102 Follow safe working practices in an automotive workplace

AURETK002 Use and maintain electrical test equipment in an automotive workplace

AURETR006 Solder electrical wiring and circuits

AURETR007 Apply knowledge of automotive electrical circuits and wiring systems

AURETR009 Install vehicle lighting and wiring systems

AURETR010 Repair wiring harnesses and looms

AURETR027 Install ancillary electronic systems and components

AURETR112 Test and repair basic electrical circuits

AURETR123 Diagnose and repair spark ignition engine management systems

AURETR124 Diagnose and repair compression ignition engine management systems

AURETR125 Test, charge and replace batteries and jump-start vehicles

AURETR128 Diagnose and repair instruments and warning systems

AURETR129 Diagnose and repair charging systems

AURETR130 Diagnose and repair starting systems

AURETR131 Diagnose and repair ignition systems

AURETR132 Diagnose and repair automotive electrical systems

AURETR135 Apply knowledge of petrol and diesel engine operation

AURETR143 Diagnose and repair electronic body management systems

AURTTA118 Develop and carry out diagnostic test strategies

AURTTE104 Inspect and service engines

#### **Elective Units**

AURAFA103 Communicate effectively in an automotive workplace

AURATA004 Provide technical guidance

AURATA005 Estimate and quote automotive mechanical and electrical repairs

AURETB101 Diagnose and repair electric braking systems

AURETD101 Diagnose and repair electronically controlled steering systems

AURETH011 Depower and reinitialise hybrid electric vehicles

AURETH015 Diagnose, remove and replace heavy electric vehicle rechargeable energy storage systems

AURETH101 Depower and reinitialise battery electric vehicles

AURETH102 Inspect and maintain battery electric vehicles\*

AURETH017 Work safely with hydrogen in the automotive industry

AURETH018 Inspect and service fuel cell components\*

AURETR005 Install automotive security systems and components

AURETR008 Remove and replace electrical units and assemblies

AURETR011 Install basic ancillary electrical systems and components

AURETR013 Inspect, test and service charging systems

AURETR014 Inspect, test and service starting systems

AURETR017 Overhaul charging system alternators

AURETR018 Overhaul starting system motors

AURETR019 Inspect, service and repair AC electric motor drive systems

AURETR026 Remove, replace and program electrical and electronic units and assemblies

AURETR042 Remove, refit and operate electrical components following body repair activities

AURETR045 Inspect, service and repair DC electric motor drive systems

AURETR115 Inspect, test and service batteries

AURETR116 Read and apply vehicle wiring schematics and drawings

AURETR120 Diagnose and repair network electronic control systems

AURETR121 Diagnose, repair and replace electronic management, monitoring and tracking systems

AURETR122 Diagnose and repair vehicle dynamic control systems

AURETR144 Diagnose and repair integrated engine and transmission management systems

AURETR149 Apply knowledge of ADAS systems to vehicle pre-repair scans

AURETR236 Diagnose and repair electronically controlled suspension systems

AURETU001 Install air conditioning systems

AURETU007 Overhaul air conditioning and HVAC system compressors

AURETU102 Recover vehicle refrigerants

AURETU103 Service air conditioning and HVAC systems

AURETU104 Diagnose and repair air conditioning and HVAC components

AURETU105 Retrofit automotive air conditioning and HVAC systems

AURHTZ101 Diagnose and repair heavy vehicle emission control systems

AURLTB103 Diagnose and repair light vehicle hydraulic braking systems

AURLTD104 Diagnose and repair light vehicle steering systems

AURLTD105 Diagnose and repair light vehicle suspension systems

AURLTE001 Remove and install light vehicle engine assemblies

AURLTE102 Diagnose and repair light vehicle engines

AURLTF101 Diagnose and repair light vehicle mechanical fuel injection systems

AURPTR002 Test and service electric outdoor power equipment

AURRTR007 Install marine electrical systems and components

AURTTA017 Carry out vehicle safety inspections

AURTTA104 Carry out servicing operations

AURTTA105 Select and use bearings, seals, gaskets, sealants and adhesives

AURTTA121 Diagnose complex system faults

AURTTB101 Inspect and service braking systems

AURTTC103 Diagnose and repair cooling systems

AURTTF101 Inspect and service petrol fuel systems

AURTTK102 Use and maintain tools and equipment in an automotive workplace

AURTTW001 Carry out soft soldering techniques

AURTTZ102 Diagnose and repair exhaust systems

AURVTA002 Remove and replace vehicle supplementary restraint systems

AURVTA104 Inspect damaged vehicle systems and recommend repairs

AURVTT003 Remove and replace automotive and marine interior trim components

AURVTW002 Carry out oxyacetylene brazing of components

AURVTW018 Carry out oxyacetylene welding, thermal heating and cutting

AURVTW101 Carry out manual metal arc welding on components

AURVTW103 Carry out advanced gas metal arc welding on vehicle body sections

AURVTW104 Carry out tungsten inert gas welding

BSBSTR401 Promote innovation in team environments

BSBWHS311 Assist with maintaining workplace safety

TAEDEL301 Provide work skill instruction

\*Note the following prerequisite unit requirements.

UNIT IN THIS QUALIFICATION	PREREQUISITE UNIT
AURETH102 Inspect and maintain battery electric vehicles	AURETH101 Depower and reinitialise battery electric vehicles
AURETH018 Inspect and service fuel cell components	AURETH101 Depower and reinitialise battery electric vehicles
	AURETH017 Work safely with hydrogen in the automotive industry

# **Qualification Mapping Information**

AUR30320 Certificate III in Automotive Electrical Technology.

# Links

Link to Companion Volume Implementation Guide