



Australian Government

AUR30320 Certificate III in Automotive Electrical Technology

Release 3

AUR30320 Certificate III in Automotive Electrical Technology

Modification History

Release	Comments
Release 3	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 7.0. Minor update to qualification to include additional elective units and rectify typographical errors.
Release 2	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.1. The following elective units of competency have been deleted as directed by the AISC: <ul style="list-style-type: none"> AURTTL010 Install LPG, CNG and LNG electrical control equipment. The above training products were identified as having zero enrolments over a three year period.
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

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

AURAF103 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*
- 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

Qualification Mapping Information

Supersedes and is not equivalent to AUR30316 Certificate III in Automotive Electrical Technology.

Links

Companion Volume Implementation Guide is found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>