



Australian Government

AUR40620 Certificate IV in Automotive Electrical Technology

Release 2

AUR40620 Certificate IV in Automotive Electrical Technology

Modification History

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

Qualification Description

This qualification reflects the role of individuals who work as master diagnostic technicians the automotive service and repair industry; servicing, diagnosing and repairing vehicle electrical systems and components. A range of advanced electrical diagnostic skills and knowledge is necessary, and leadership and supervision of others would be expected.

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

Entry Requirements

Those undertaking Certificate IV in Automotive Electrical Technology must have completed AUR30320 Certificate III in Automotive Electrical Technology or be able to demonstrate equivalent competency.

Packaging Rules

Total number of units = 10

1 core unit, plus

9 elective units, of which:

- all **9** units may be from the elective units listed below
- up to **3** units may be from a Certificate III qualification or above in this Training Package or another endorsed Training Package or accredited course.

Elective units chosen 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 chosen for the qualification, and contribute to a valid vocational outcome.

Specialisations

Any combination of elective units that meets the packaging rules above can be selected for the award of the *Certificate IV in Automotive Electrical Technology*. Where relevant, the choice of elective units set out in those packaging rules can serve to provide the qualification with one of the following specialisations. The rules to achieve a specialisation are detailed below.

The achievement of a specialisation will be identified on testamurs as follows:

- Certificate IV in Automotive Electrical Technology (Battery Electric Vehicle)
- Certificate IV in Automotive Electrical Technology (Hybrid Electric Vehicle).

Battery Electric Vehicle specialisation

Complete at least 6 units in Specialist Elective Unit Group A, noting the prerequisite unit requirements of some units in this stream.

Hybrid Electric Vehicle specialisation

Complete all units listed in Specialist Elective Unit Group B, noting the prerequisite unit requirements of some units in this stream.

Core Units

AURTTA021 Diagnose complex system faults

Specialist Elective Units

Group A: Battery electric vehicles

AURETH002 Service and maintain battery electric vehicles*

AURETH101 Depower and reinitialise battery electric vehicles

AURETH103 Diagnose and repair high voltage rechargeable energy storage systems in battery electric vehicles*

AURETH104 Diagnose and repair traction motor speed control systems in battery electric vehicles

AURETH105 Diagnose and repair high voltage traction motors in battery electric vehicles

AURETH106 Diagnose and repair auxiliary motors and associated components in battery electric vehicles*

AURETH107 Diagnose and repair system instrumentation and safety interlocks in battery electric vehicles*

AURETH108 Diagnose and repair HVAC and rechargeable energy storage cooling systems in battery electric vehicle*

AURETH109 Diagnose and repair DC to DC converters in battery electric vehicles*

Group B: Hybrid electric vehicles

AURETH011 Depower and reinitialise hybrid electric vehicles

AURETH012 Service and maintain electrical components in hybrid electric vehicles*

AURETH110 Diagnose and repair high voltage rechargeable energy storage systems in hybrid electric vehicles*

General Elective Units

AURAEA003 Monitor environmental and sustainability best practice in an automotive workplace

AURAF007 Develop and document specifications and procedures

AURAF0106 Conduct research and present technical reports

AURAKA002 Adapt work processes to new technologies in an automotive workplace

AURANN011 Estimate and quote automotive body repairs

AURAQA002 Inspect technical quality of work in an automotive workplace

AURAQA003 Maintain quality processes in an automotive workplace

AURATA004 Provide technical guidance

AURATA005 Estimate and quote automotive mechanical and electrical repairs

AURETB101 Diagnose and repair electric braking systems

AURETH114 Diagnose complex faults in hybrid and battery electric vehicle network management systems

AURETR033 Develop and apply network electronic control system modifications

AURETR034 Develop and apply electrical system modifications

AURETR104 Diagnose complex faults in convenience and entertainment systems

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

AURETR137 Diagnose complex faults in light vehicle safety systems

AURETR138 Diagnose complex faults in motorcycle electrical and electronic systems

AURETR139 Diagnose complex faults in light vehicle theft-deterrent systems

AURETR140 Diagnose complex faults in vehicle monitoring and protection systems

AURETU007 Overhaul air conditioning and HVAC system compressors

AURETU104 Diagnose and repair air conditioning and HVAC components

AURETU105 Retrofit automotive air conditioning and HVAC systems

AURETU106 Diagnose complex faults in air conditioning and HVAC systems

AURTNA001 Estimate and quote automotive vehicle or machinery modifications

AURTTA017 Carry out vehicle safety inspections

AURTTA126 Diagnose complex faults in electronic over hydraulic systems

AURTTE001 Apply knowledge of engine science

BSBHRM413 Support the learning and development of teams and individuals

BSBPEF301 Organise personal work priorities

BSBSTR401 Promote innovation in team environments

BSBWHS411 Implement and monitor WHS policies, procedures and programs

TAEDEL301 Provide work skill instruction

TAEDEL404 Mentor in the workplace

*Note the following prerequisite unit requirements.

UNIT IN THIS QUALIFICATION	PREREQUISITE UNIT(S)
AURETH002 Service and maintain battery electric vehicles	AURETH001 Depower and reinitialise battery electric vehicles
AURETH012 Service and maintain electrical components in hybrid electric vehicles	AURETH011 Depower and reinitialise hybrid electric vehicles
AURETH103 Diagnose and repair high voltage rechargeable energy storage systems in battery electric vehicles	AURETH101 Depower and reinitialise battery electric vehicles
AURETH106 Diagnose and repair auxiliary motors and associated components in battery electric vehicles	AURETH101 Depower and reinitialise battery electric vehicles
AURETH107 Diagnose and repair system instrumentation and safety interlocks in battery electric vehicles	AURETH101 Depower and reinitialise battery electric vehicles
AURETH108 Diagnose and repair HVAC and rechargeable energy storage cooling systems in battery electric vehicle	AURETH101 Depower and reinitialise battery electric vehicles
AURETH109 Diagnose and repair DC to DC converters in battery electric vehicles	AURETH101 Depower and reinitialise battery electric vehicles AURETR125 Test, charge and replace batteries and jump-start vehicles
AURETH110 Diagnose and repair high voltage rechargeable energy storage systems in hybrid electric vehicles	AURETR125 Test, charge and replace batteries and jump-start vehicles

Qualification Mapping Information

Supersedes and is equivalent to AUR40616 Certificate IV 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>