



**Australian Government**

# **AUR32721 Certificate III in Automotive Electric Vehicle Technology**

**Release 1**

# AUR32721 Certificate III in Automotive Electric Vehicle Technology

## Modification History

Release	Comments
Release 1	This version first released with the Automotive Retail, Services and Repair Training Package Version 7.0. Newly created qualification.

## Qualification Description

This qualification reflects the role of individuals who service, diagnose and repair battery electric vehicles and components in the automotive, service and repair industry who carry out work according to Australian Standards (AS) 5732 Electric vehicle operations - Maintenance and repair.

Licensing, legislative, regulatory or certification considerations

Licensing, legislative and certification requirements may apply to this qualification but vary between states, territories and industry sectors.

Licensing requirements relating to handling refrigerants are governed by the Australian Refrigeration Council.

Users are advised to check with the relevant state/territory jurisdiction or industry body for current requirements.

## Entry Requirements

Nil

## Packaging Rules

Total number of units = 30

**17 core units** plus

**13 elective units**, of which:

- all units in one of the Specialist elective Groups A or B below must be chosen
- of the remaining units required to make up the elective unit total:
  - all may be from the General Elective Group C units listed below
  - up to 3 may be from elsewhere in this or any other currently endorsed Certificate III or above training package qualification 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 chosen for the qualification, and contribute to a valid industry-supported vocational outcome.

### Specialisations

Specialisation in this qualification is mandatory. The achievement of a specialisation will be identified on testamurs as follows:

- AUR32721 Certificate III in Automotive Electric Vehicle Technology (Light Vehicle)
- AUR32721 Certificate III in Automotive Electric Vehicle Technology (Heavy Vehicle)

### Packaging rules to achieve a specialisation

#### Light Vehicle

Complete all units from Group A – Light Vehicle

#### Heavy Vehicle

Complete all units from Group B – Heavy Vehicle

#### Core units

AURAEA002 Follow environmental and sustainability best practice in an automotive workplace

AURASA102 Follow safe working practices in an automotive workplace

AURETH101 Depower and reinitialise battery electric vehicles

AURETH102 Inspect and maintain 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\*

AURETK002 Use and maintain electrical test equipment in an automotive workplace

AURETR112 Test and repair basic electrical circuits

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

AURETU103 Service air conditioning and HVAC systems

AURTTA118 Develop and carry out diagnostic test strategies

AURTTK102 Use and maintain tools and equipment in an automotive workplace

## Elective Units

### Group A - Light Vehicle

- AURETH103 Diagnose and repair high voltage rechargeable energy storage systems in battery electric vehicles
- AURETR132 Diagnose and repair automotive electrical 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
- AURLTJ102 Remove, inspect, repair and refit light vehicle tyres and tubes
- AURTTB101 Inspect and service braking systems
- AURTTJ011 Balance wheels and tyres

### Group B - Heavy Vehicle

- AURETH015 Diagnose, remove and replace heavy electric vehicle rechargeable energy storage system
- AURHTB101 Diagnose and repair heavy vehicle air braking systems
- AURHTD102 Diagnose and repair heavy commercial vehicle steering systems
- AURHTD103 Diagnose and repair heavy commercial vehicle suspension systems
- AURHTQ103 Diagnose and repair heavy vehicle drive shafts
- AURTTA006 Inspect and service hydraulic systems
- AURTTQ001 Inspect and service final drive assemblies

### Group C - General Electives

- AURACA101 Respond to customer needs and enquiries in an automotive workplace
- AURAF A002 Read and respond to automotive workplace information
- AURAF A103 Communicate effectively in an automotive workplace
- AURAKA001 Use information technology systems
- AURATA005 Estimate and quote automotive mechanical and electrical repairs
- AURETD101 Diagnose and repair electronically controlled steering systems
- AURETR006 Solder electrical wiring and circuits
- AURETR010 Repair wiring harnesses and looms
- AURETR011 Install basic ancillary electrical systems and components
- AURETR026 Remove, replace and program electrical and electronic units and assemblies
- AURETR028 Diagnose and repair instruments and warning systems
- AURETR120 Diagnose and repair network electronic control systems
- AURETR122 Diagnose and repair vehicle dynamic control systems
- AURETR143 Diagnose and repair electronic body management systems
- AURETR149 Apply knowledge of ADAS technology to vehicle pre-repair scans
- AURETR236 Diagnose and repair electronically controlled suspension systems
- AURETU104 Diagnose and repair air conditioning and HVAC components

AURLTD002 Service and repair light vehicle lift assisted suspension systems  
 AURLTD101 Select and install performance enhanced suspension system products  
 AURLTD106 Carry out light vehicle wheel alignment operations  
 AURLTQ102 Diagnose and repair light vehicle drive shafts  
 AURTTD002 Inspect and service steering systems  
 AURTTD004 Inspect and service suspension systems  
 AURTTA104 Carry out servicing operations  
 AURTTK001 Use and maintain measuring equipment in an automotive workplace  
 AURVTN104 Remove, replace and align bolt-on vehicle body panels and components  
 AURVTT003 Remove and replace automotive and marine interior trim components

\*Note the following prerequisite unit requirements.

UNIT IN THIS QUALIFICATION	PREREQUISITE UNITS
AURETH102 Inspect and maintain battery electric vehicles	<ul style="list-style-type: none"> <li>AURETH101 Depower and reinitialise battery electric vehicles</li> </ul>
AURETH103 Diagnose and repair high voltage rechargeable energy storage systems in battery electric vehicles	<ul style="list-style-type: none"> <li>AURETH101 Depower and reinitialise battery electric vehicles</li> </ul>
AURETH106 Diagnose and repair auxiliary motors and associated components in battery electric vehicles	<ul style="list-style-type: none"> <li>AURETH101 Depower and reinitialise battery electric vehicles</li> </ul>
AURETH107 Diagnose and repair system instrumentation and safety interlocks in battery electric vehicles	<ul style="list-style-type: none"> <li>AURETH101 Depower and reinitialise battery electric vehicles</li> </ul>
AURETH108 Diagnose and repair HVAC and rechargeable energy storage cooling systems in battery electric vehicle	<ul style="list-style-type: none"> <li>AURETH101 Depower and reinitialise battery electric vehicles</li> </ul>
AURETH109 Diagnose and repair DC to DC converters in battery electric vehicles	<ul style="list-style-type: none"> <li>AURETH101 Depower and reinitialise battery electric vehicles</li> <li>AURETR125 Test, charge and replace batteries and jump-start vehicles</li> </ul>

## Qualification Mapping Information

No equivalent qualification.

## **Links**

Companion Volume Implementation Guide is found on VETNet -

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