AUR32721 Certificate III in Automotive Electric Vehicle Technology – FOR PUBLIC REVIEW (Friday 30th April – Monday 31st May 2021).

# 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.

Individuals are required to have knowledge of the application of Australian Standards where applicable.

Licensing, legislative, regulatory or certification considerations

The completion of this qualification enables an individual to apply for an *AAC02 - Refrigerant handling licence - qualified persons.* Users are advised that the scope of the licence will be contingent on unit of competency selection. Trainee licences also apply to those handling refrigerants while undertaking training. These licences are governed by the Australian Refrigeration Council, which should be contacted for further information.

# Entry Requirements

Nil

# Packaging Rules

**Total number of units = 31**

**18 core units** plus

**13 elective units**, of which:

* all units must be selected from one of the Specialist Elective Groups, either A or B below
* 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 II 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.

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

AURETK002 Use and maintain electrical test equipment in an automotive workplace

AURETH002 Service and maintain battery electric vehicles

AURETH101 Depower and reinitialise 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

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

AURETR112 Test and repair basic electrical circuits

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

AURETU103 Service air conditioning and HVAC systems

AURETU104 Diagnose and repair air conditioning and HVAC components

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

AURLTB103 Diagnose and repair light vehicle hydraulic braking systems

AURLTD104 Diagnose and repair light vehicle steering systems

AURLTB103 Diagnose and repair light vehicle hydraulic braking systems

AURLTD105 Diagnose and repair light vehicle suspension systems

AURTTJ001 Balance wheels and tyres

AURLTJ002 Remove, inspect, repair and refit light vehicle tyres and tubes

AURTTB101 Inspect and service braking systems

### Group B – Heavy Vehicle

AURETH015 Diagnose and repair 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

AURAFA103 Communicate effectively in an automotive workplace

AURAKA001 Use information technology systems

AURATA005 Estimate and quote automotive mechanical and electrical repairs

AURETR010 Repair wiring harnesses and looms

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

AURETR112 Test and repair basic electrical circuits

AURETR120 Diagnose and repair network electronic control systems

AURETR122 Diagnose and repair vehicle dynamic control systems

AURETR143 Diagnose and repair electronic body management systems

AURLTD106 Carry out light vehicle wheel alignment operations

AURTTA104 Carry out servicing operations

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 |
| --- | --- |
| AURETH002 Service and maintain battery electric vehicles | * AURETH001 Depower and reinitialise battery 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 |

# Qualification Mapping Information

No equivalent qualification. New qualification.

# Links

Companion Volume Implementation Guide is found on VETNet:

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