AUR32012 Certificate III in Automotive Alternative Fuel Technology

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# Modification History

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| --- | --- |
| Release | Comment |
| Release 1 | Replaces AUR30611 Certificate III in Automotive Specialist |

# Description

This qualification covers the skills and knowledge required to install and repair alternative fuel systems and associated systems within the automotive service and repair sector.

Job roles or employment outcomes

The Certificate III in Automotive Alternative Fuel Technology is intended to prepare new employees or recognise and develop existing workers performing mechanical work in the automotive light or heavy vehicle service and repair sector.

Job outcomes targeted by this qualification include:

* automotive light vehicle repair technicians
* automotive heavy vehicle repair technicians

Application

This qualification is suitable for an Australian Apprenticeship pathway.

# Pathways Information

Pathways into the qualification

Credit may be granted towards this qualification by those who have completed AUR20512 Certificate II in Automotive Servicing Technology, AUR20712 Certificate II in Automotive Vocational Preparation or other relevant qualifications.

Pathways from the qualification

Further training pathways from this qualification include AUR40212 Certificate IV in Automotive Mechanical Diagnosis, AUR40812 Certificate IV in Automotive Mechanical Overhauling or other relevant qualifications.

# Licensing/Regulatory Information

There are no specific licences that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements. Local regulations should be checked for details.

# Entry Requirements

This qualification may be accessed by direct entry.

# Employability Skills Summary

| EMPLOYABILITY SKILLS QUALIFICATION SUMMARY |
| --- |
| The following table contains a summary of the employability skills as identified by the automotive industry for this qualification. The employability skills facets described here are broad industry requirements that may vary depending on qualification packaging options. |
| Employability Skill | Industry/enterprise requirements for this qualification include: |
| Communication | * clearly communicating workplace information and ideas with workplace colleagues (verbal and non-verbal), including use of automotive terms
* completing workplace reports
* using and contributing to workplace procedures
* maintaining workplace records
* communicating with colleagues and clients to handle verbal enquiries, such as clarifying instructions and responding to requests for information
* interpreting the needs of customers
* reading and interpreting workplace related documentation
 |
| Teamwork | * identifying and describe own role and role of others
* working within a team
* working with diverse individuals and groups
* applying knowledge of own role to complete activities efficiently to support team activities and tasks
 |
| Problem solving | * recognising a workplace problem or a potential problem and take action
* determining problems needing priority action
* referring problems outside area of responsibility to appropriate person and suggesting possible causes
* seeking information and assistance as required to solve problems
* using a range of problem-solving techniques
* taking action to resolve concerns
* developing practical responses to common breakdowns in workplace systems and procedures
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| Initiative and enterprise | * adapting to new and emerging situations in the workplace
* being proactive and creative in responding to workplace problems, changes and challenges
 |
| Planning and organising | * planning own work requirements and prioritising actions to achieve required outcomes and ensure tasks are completed on time
* identifying risk factors and taking action to minimise risk
 |
| Self-management | * selecting and using appropriate equipment, materials, processes and procedures
* recognising limitations and seeking timely advice
* planning own work requirements, setting own work program and managing time to ensure tasks are completed on time
* following workplace documentation, such as codes of practice or operating procedures
 |
| Learning | * asking questions to gain information
* identifying sources of information, assistance and expert knowledge to expand knowledge, skills and understanding
* participating in self-improvement activities
* participating in development of workplace continuous improvement strategies
* helping others develop competency
 |
| Technology | * operating diagnostic and test equipment
* performance testing of components, systems and equipment
* using tools and equipment efficiently and safely
* storing and caring for components, parts, tools, test equipment and support equipment
* using business technology to collect, analyse and provide information
 |

# Packaging Rules

To be awarded this qualification, competency must be demonstrated in 23 units of competency, consisting of:

* 11 core units

plus

* 2 specialist elective units in one of the selected specialist groups relating to occupational streams

plus

* 10 general elective units, of which:
* up 10 elective units may be chosen from the elective units listed below
* up to 4 elective units may be chosen from a Certificate II qualification or above in this Training Package or another endorsed Training Package or accredited course, provided that the units chosen contribute to the vocational outcome of this qualification and do not duplicate the outcome of another unit chosen for the qualification.

Core units

| Unit code | Unit title |
| --- | --- |
| Common - Environment |
| AURAEA3003 | Monitor environmental and sustainability best practice in the automotive mechanical industry |
| Common - Health and Safety |
| AURASA2002 | Apply safe working practices in an automotive workplace |
| Electrical - Technical - Electrical and Electronic |
| AURETR2012 | Test and repair basic electrical circuits |
| AURETR3025 | Test, charge and replace batteries |
| Mechanical Miscellaneous - Technical  |
| AURTTA2004 | Carry out servicing operations |
| AURTTA3018 | Carry out diagnostic procedures |
| Mechanical Miscellaneous - Technical - Cooling Systems |
| AURTTC2001 | Inspect and service cooling systems |
| Mechanical Miscellaneous - Technical - Engines |
| AURTTE2004 | Inspect and service engines |
| Mechanical Miscellaneous - Technical - Fuel Systems |
| AURTTF2001 | Service petrol fuel systems |
| Mechanical Miscellaneous - Technical - Tools and Equipment |
| AURTTK2002 | Use and maintain workplace tools and equipment |
| Mechanical Miscellaneous - Technical - Emission and Exhaust |
| AURTTZ2001 | Inspect and service emission control systems |

Specialist elective units

Group A: CNG

| Unit code | Unit title |
| --- | --- |
| Mechanical Miscellaneous - Technical - Alternative Fuels |
| AURTTL3001 | Service CNG fuel systems |
| AURTTL3002 | Diagnose and repair CNG fuel systems |

Group B: LNG

| Unit code | Unit title |
| --- | --- |
| Mechanical Miscellaneous - Technical - Alternative Fuels |
| AURTTL3004 | Service LNG fuel systems |
| AURTTL3005 | Diagnose and repair LNG fuel systems |

Group C: LPG

| Unit code | Unit title |
| --- | --- |
| Mechanical Miscellaneous - Technical - Alternative Fuels |
| AURTTL3007 | Service LPG fuel systems |
| AURTTL3008 | Diagnose and repair LPG fuel systems |

General elective units

| Unit Code | Unit Title |
| --- | --- |
| Common – Sales and Marketing |
| AURACA2001 | Establish relations with customers |
| Common - Foundation Skills |
| AURAFA2003 | Communicate effectively in an automotive workplace |
| Common - Technical |
| AURATA2002 | Read and interpret engineering drawings |
| Electrical - Technical - Electrical and Electronic |
| AURETR2006 | Carry out soldering of electrical wiring and circuits |
| AURETR2010 | Fabricate, test and repair wiring harnesses and looms |
| AURETR3023 | Diagnose and repair electronic spark ignition engine management systems |
| AURETR3031 | Diagnose and repair ignition systems |
| AURETR3032 | Repair electrical systems |
| Mechanical - Heavy Vehicle - Technical - Alternative Fuels |
| AURHTL4001 | Inspect, repair and diagnose alternative fuel systems for heavy vehicle engines |
| Mechanical - Heavy Vehicle - Technical - Emission and Exhaust |
| AURHTZ3001 | Diagnose and repair heavy vehicle emission control systems |
| Mechanical - Light Vehicle - Technical - Engines |
| AURLTE3002 | Repair engines and associated engine components (light vehicle) |
| Mechanical Miscellaneous - Technical - Fuel Systems |
| AURTTF3004 | Repair diesel fuel injection systems |
| AURTTF3006 | Diagnose and repair petrol carburettor systems |
| Mechanical Miscellaneous - Technical - Alternative Fuels |
| AURTTL3003 | Install CNG fuel systems |
| AURTTL3006 | Install LNG fuel systems |
| AURTTL3009 | Install LPG fuel systems |
| AURTTL3010 | Install LPG, CNG and LNG electrical control equipment |
| Mechanical Miscellaneous - Technical - Welding, Grinding, Machining and Soldering |
| AURTTW2001 | Carry out soft soldering techniques |
| Vehicle Body - Technical - Welding, Grinding, Machining and Soldering |
| AURVTW2001 | Carry out manual metal arc welding procedures |
| AURVTW2002 | Carry out brazing procedures |
| AURVTW2003 | Carry out gas metal arc welding procedures |
| AURVTW2004 | Carry out gas tungsten arc welding procedures |
| AURVTW2008 | Carry out oxy acetylene welding, thermal cutting and thermal heating procedures |

# Custom Content Section

Not applicable.