



Australian Government

AUR32012 Certificate III in Automotive Alternative Fuel Technology

Release: 1

AUR32012 Certificate III in Automotive Alternative Fuel Technology

Modification History

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	
<p>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.</p>	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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
Initiative and enterprise	<ul style="list-style-type: none"> • adapting to new and emerging situations in the workplace • being proactive and creative in responding to workplace problems, changes and challenges
Planning and organising	<ul style="list-style-type: none"> • 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

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:
Self-management	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	
AURTTTC2001	Inspect and service cooling systems
Mechanical Miscellaneous - Technical - Engines	

Unit code	Unit title
AURTTE2004	Inspect and service engines
Mechanical Miscellaneous - Technical - Fuel Systems	
AURTTTF2001	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	

Unit code	Unit title
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	
AURAF2003	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)

Unit Code	Unit Title
Mechanical Miscellaneous - Technical - Fuel Systems	
AURTTTF3004	Repair diesel fuel injection systems
AURTTTF3006	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.