



Australian Government

AUR50212 Diploma of Automotive Technology

Release: 1

AUR50212 Diploma of Automotive Technology

Modification History

Release	Comment
Release 1	Replaces AUR50205 Diploma of Automotive Technology

Description

This qualification covers the skills and knowledge required to diagnose, analyse, evaluate, design and modify automotive electrical and mechanical systems. It is suitable for those working in the automotive service and repair industry at the forefront of the implementation of new technologies.

Job roles and employment outcomes

The Diploma of Automotive Technology prepares new employees or recognises and develops existing workers who are performing advanced diagnosis and design tasks in the automotive industry.

Job roles related to this qualification include:

- advanced diagnostic technician
- automotive system designer.

Application

This qualification is suitable for an Australian Apprenticeship pathway.

Pathways Information

Pathways from the qualification

Further training pathways from this qualification may lead to a relevant Advanced Diploma qualification.

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

Those undertaking the Diploma of Automotive Technology are required to have completed AUR40212 Certificate IV in Automotive Mechanical Diagnosis or AUR40812 Certificate IV in Automotive Mechanical Overhauling or be able to demonstrate equivalent competency.

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 verbal and non-verbal information and ideas with workplace colleagues, 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 describing own role and role of others - 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 potential problem and taking 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	- 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

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

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Employability Skill	Industry/enterprise requirements for this qualification include:
	• 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 and 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 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 **12 units** of competency, consisting of:

- **1 core unit**

plus

- **11 elective units**, of which:

- up to **11** elective units may be chosen from the elective units listed below
- up to **2** elective units may be chosen from a Certificate IV 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 – Foundation Skills	
AURFA5007	Develop and document specifications and procedures

Elective units

Unit code	Unit title
Common – Foundation Skills	
AURFA5006	Prepare technical reports
Electrical – Technical	
AURETA5001	Analyse and evaluate electrical and electronic faults in electric over-hydraulic systems
AURETA5002	Analyse and evaluate electrical and electronic faults in safety systems
AURETA5003	Analyse and evaluate electrical and electronic faults in monitoring and protection systems
AURETA5004	Analyse and evaluate electrical and electronic faults in convenience and entertainment systems
AURETA5005	Analyse and evaluate electrical and electronic faults in theft-deterrent systems

AURETA5006	Analyse and evaluate electrical and electronic faults in climate-control systems
Electrical – Technical – Brakes	
AURETB5002	Analyse and evaluate electrical and electronic faults in braking systems
Electrical – Technical – Steering and Suspension	
AURETD5002	Analyse and evaluate electrical and electronic faults in stability, steering and suspension systems
Electrical – Technical – Engines	
AURETE5001	Analyse and evaluate electrical and electronic faults in engine management systems
Electrical – Technical – Hybrid Vehicle and Battery Electric Vehicle	
AURETH5013	Analyse and evaluate electrical and electronic faults in electric and hybrid vehicle systems
Electrical – Technical – Electrical and Electronic	
AURETR5033	Develop and apply electronic systems modification
AURETR5034	Develop and apply electrical systems modification
Electrical – Technical – Transmission	
AURETX5001	Analyse and evaluate electrical and electronic faults in transmission and driveline systems
Mechanical – Heavy Vehicle – Technical – Brakes	
AURHTB5005	Analyse and evaluate heavy vehicle braking system faults
Mechanical – Heavy Vehicle – Technical – Steering and Suspension	
AURHTD5005	Analyse and evaluate heavy vehicle steering and suspension system faults
Mechanical – Heavy Vehicle – Technical – Engines	
AURHTE5004	Analyse and evaluate heavy vehicle engine and fuel system faults
Mechanical – Heavy Vehicle – Technical – Transmission	
AURHTX5005	Analyse and evaluate heavy vehicle transmission system faults

Mechanical – Motorcycle – Technical

AURJTA5003	Analyse and evaluate motorcycle engine and transmission system faults
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Mechanical – Motorcycle – Technical – Brakes

AURJTB5002	Analyse and evaluate motorcycle braking system faults
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Mechanical – Motorcycle – Technical – Steering and Suspension

AURJTD5006	Analyse and evaluate motorcycle steering, suspension and frame system faults
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Mechanical – Motorcycle – Technical – Electrical and Electronic

AURJTR5001	Analyse and evaluate motorcycle electrical and electronic system faults
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Mechanical – Plant and Heavy Equipment – Technical

AURKTA5006	Analyse and evaluate tracked mobile plant transmission, steering and braking systems faults
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AURKTA5007	Analyse and evaluate mobile plant hydraulic system faults
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Mechanical – Mobile Plant – Technical – Brakes

AURKTB5002	Analyse and evaluate wheeled mobile plant braking system faults
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Mechanical – Mobile Plant – Technical – Steering and Suspension

AURKTD5003	Analyse and evaluate wheeled mobile plant steering and suspension system faults
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AURKTD5004	Analyse and evaluate tracked mobile plant undercarriage and suspension system faults
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Mechanical – Mobile Plant – Technical – Engines

AURKTE5001	Analyse and evaluate mobile plant engine and fuel system faults
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Mechanical – Mobile Plant – Technical – Transmission

AURKTX5002	Analyse and evaluate wheeled mobile plant transmission system faults
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Mechanical – Light Vehicle – Technical – Brakes

AURLTB5002	Analyse and evaluate light vehicle braking system faults
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Mechanical – Light Vehicle – Technical – Steering and Suspension

AURLTD5007	Analyse and evaluate light vehicle steering and suspension system faults
Mechanical – Light Vehicle – Technical – Engines	
AURLTE5003	Analyse and evaluate light vehicle engine and fuel system faults
Mechanical – Light Vehicle – Technical – Driveline and Final Drives	
AURLTQ5003	Analyse and evaluate light vehicle driveline system faults
Marine – Technical	
AURRTA5007	Analyse and evaluate light marine hydraulic system faults
AURRTA5008	Analyse and evaluate light marine hull performance and stability system faults
Marine – Technical – Engines	
AURRTE5012	Analyse and evaluate light marine engine and powerhead system faults
Marine – Technical – Transmission	
AURRTX5005	Analyse and evaluate light marine transmission system faults
Mechanical Miscellaneous – Loss Assessment or Repair Quoting	
AURTNA5001	Estimate and calculate costs to repair, maintain or modify a vehicle
Mechanical Miscellaneous – Technical	
AURTTA5022	Develop and apply mechanical system modifications
AURTTA5023	Develop and apply hydraulic system modifications
AURTTA5024	Develop and apply pneumatic system modifications
Mechanical Miscellaneous – Technical – Alternative Fuels	
AURTTL5014	Analyse and evaluate gas fuel system faults
AURTTL5015	Develop and apply gas fuel system modifications
Vehicle Body – Technical – Body	
AURVTN5034	Evaluate and select bodywork materials, equipment and processes
Imported Units	

MSAENV472B	Implement and monitor environmentally sustainable work practices
MSAENV672B	Develop workplace policy and procedures for environmental sustainability

Custom Content Section

Not applicable.