



**Australian Government**

# **AUR40812 Certificate IV in Automotive Mechanical Overhauling**

**Release: 1**

# AUR40812 Certificate IV in Automotive Mechanical Overhauling

## Modification History

| Release   | Comment   |
|-----------|---|
| Release 1 | Replaces AUR40208 Certificate IV in Automotive Technology |

## Description

This qualification covers the skills and knowledge required to perform advanced troubleshooting and repair operations in an automotive retail, service and repair environment.

### Job roles and employment outcomes

The Certificate IV in Automotive Mechanical Overhauling is intended to provide advanced training for automotive technicians who want to further develop their repair and technical skills.

Employment outcomes targeted by this qualification include:

- automotive lead/master technician

### Application

This qualification is suitable for an Australian Apprenticeship pathway.

## Pathways Information

### Pathways from the qualification

Further training pathways from this qualification include AUR50112 Diploma of Automotive Management and AUR50212 Diploma in Automotive Technology 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

Those undertaking Certificate IV in Automotive Mechanical Overhauling are required to have completed an automotive mechanical Certificate III qualification 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:   |
|----------------------------------|--|
| <b>Communication</b>             | <ul style="list-style-type: none"> <li>clearly communicating workplace information and ideas with workplace colleagues (verbal and non-verbal), including use of automotive terms</li> <li>completing workplace reports</li> <li>using and contributing to workplace procedures</li> <li>maintaining workplace records</li> <li>communicating with colleagues and clients to handle verbal enquiries, such as clarifying instructions and responding to requests for information</li> <li>interpreting the needs of customers</li> <li>reading and interpreting workplace related documentation</li> </ul> |
| <b>Teamwork</b>                  | <ul style="list-style-type: none"> <li>identifying and describe own role and role of others</li> <li>working within a team</li> <li>working with diverse individuals and groups</li> <li>applying knowledge of own role to complete activities efficiently to support team activities and tasks</li> </ul>   |
| <b>Problem solving</b>           | <ul style="list-style-type: none"> <li>recognising a workplace problem or a potential problem and take action</li> <li>determining problems needing priority action</li> <li>referring problems outside area of responsibility to appropriate person and suggesting possible causes</li> <li>seeking information and assistance as required to solve problems</li> <li>using a range of problem-solving techniques</li> <li>taking action to resolve concerns</li> <li>developing practical responses to common breakdowns in workplace systems and procedures</li> </ul>                                  |
| <b>Initiative and enterprise</b> | <ul style="list-style-type: none"> <li>adapting to new and emerging situations in the workplace</li> <li>being proactive and creative in responding to workplace problems, changes and challenges</li> </ul>   |
| <b>Planning and organising</b>   | <ul style="list-style-type: none"> <li>planning own work requirements and prioritising actions to achieve required outcomes and ensure tasks are completed on time</li> <li>identifying risk factors and taking action to minimise risk</li> </ul>   |

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

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| <b>Employability Skill</b> | <b>Industry/enterprise requirements for this qualification include:</b>  |
|----------------------------|--|
| <b>Self-management</b>     | <ul style="list-style-type: none"><li>• selecting and using appropriate equipment, materials, processes and procedures</li><li>• recognising limitations and seeking timely advice</li><li>• planning own work requirements, setting own work program and managing time to ensure tasks are completed on time</li><li>• following workplace documentation, such as codes of practice or operating procedures</li></ul> |
| <b>Learning</b>            | <ul style="list-style-type: none"><li>• asking questions to gain information</li><li>• identifying sources of information, assistance and expert knowledge to expand knowledge, skills and understanding</li><li>• participating in self-improvement activities</li><li>• participating in development of workplace continuous improvement strategies</li><li>• helping others develop competency</li></ul>            |
| <b>Technology</b>          | <ul style="list-style-type: none"><li>• operating diagnostic and test equipment</li><li>• performance testing of components, systems and equipment</li><li>• using tools and equipment efficiently and safely</li><li>• storing and caring for components, parts, tools, test equipment and support equipment</li><li>• using business technology to collect, analyse and provide information</li></ul>                |

## Packaging Rules

To be awarded this qualification, competency must be demonstrated in **10 units** of competency, consisting of:

- **1 core unit**

plus

- **9 elective units**; of which:

- up to **9** 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, 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                                   |
|---|--|
| <b>Mechanical Miscellaneous - Technical</b> |  |
| AURTTA4021                                  | Carry out diagnosis of complex system faults |

### Elective units

| Unit Code   | Unit Title   |
|---|--|
| <b>Electrical - Technical - Electrical and Electronic</b>   |  |
| AURETR3017  | Overhaul charging system alternators                 |
| AURETR3018  | Overhaul starting motors                             |
| <b>Electrical - Technical – Air Conditioning and HVAC</b>   |  |
| AURETU4007  | Overhaul air conditioning system components          |
| <b>Mechanical - Heavy Vehicle - Technical - Brakes</b>      |  |
| AURHTB4003  | Overhaul braking system components (heavy)           |
| AURHTB4004  | Overhaul air braking systems and components          |
| <b>Mechanical - Heavy Vehicle - Steering and Suspension</b> |  |
| AURHTD3004  | Carry out wheel alignment operations (heavy vehicle) |

|   |  |
|---|--|
| <b>Mechanical - Light Vehicle - Technical - Brakes</b>                  |  |
| AURLTB4001  | Overhaul braking system components (light)                       |
| <b>Mechanical - Light Vehicle - Technical - Steering and Suspension</b> |  |
| AURLTD3006  | Carry out wheel alignment operations (light vehicle)             |
| <b>Motorsport - Technical</b>   |  |
| AURMTA3007  | Conduct non-destructive testing                                  |
| <b>Motorsport - Technical - Engines</b>                                 |  |
| AURMTE4001  | Test engines using a dynamometer                                 |
| <b>Outdoor Power Equipment - Technical - Engines</b>                    |  |
| AURPTE4004  | Overhaul engines and engine components (outdoor power equipment) |
| <b>Marine - Technical - Engines</b>                                     |  |
| AURRTE4011  | Overhaul two and four cycle outboard engines                     |
| <b>Mechanical Miscellaneous – Technical – Steering and Suspension</b>   |  |
| AURTTD4005  | Overhaul steering system components                              |
| <b>Mechanical Miscellaneous - Technical - Engines</b>                   |  |
| AURTTE4005  | Overhaul engines and associated engine components                |
| <b>Mechanical Miscellaneous - Technical - Fuel Systems</b>              |  |
| AURTTF4003  | Overhaul diesel fuel injection systems                           |
| AURTTF4007  | Overhaul petrol fuel system components                           |
| <b>Mechanical Miscellaneous - Technical - Manufacture</b>               |  |
| AURTTM3001  | Operate and monitor computer numerical control machines          |
| AURTTM3002  | Repair bearing tunnels and connecting rods in engines            |
| AURTTM3003  | Apply metal to rebuild engine components                         |
| AURTTM3004  | Assemble engine blocks and sub-assemblies                        |
| AURTTM3005  | Balance rotating and reciprocating engine components             |

|  |  |
|--|--|
| AURTTM3006   | Perform advanced machining and blueprinting of engine components |
| AURTTM3007   | Carry out grinding operations                                    |
| AURTTM3008   | Dismantle and evaluate engine blocks and sub-assemblies          |
| AURTTM3009   | Fit sleeves and bore and hone engine cylinders                   |
| AURTTM3010   | Heat treat, straighten and reclaim engine components             |
| AURTTM3011   | Recondition engine cylinder heads                                |
| <b>Mechanical Miscellaneous - Technical - Driveline and Final Drives</b>                 |  |
| AURTTQ4004   | Overhaul final drive assemblies                                  |
| <b>Mechanical Miscellaneous - Technical - Welding, Grinding, Machining and Soldering</b> |  |
| AURTTW3003   | Carry out machining operations                                   |
| <b>Mechanical Miscellaneous - Technical - Transmission</b>                               |  |
| AURTTX4007   | Overhaul clutch assemblies                                       |
| AURTTX4008   | Overhaul transmissions (manual)                                  |
| AURTTX4009   | Overhaul transmissions (automatic)                               |
| AURTTX4010   | Overhaul transmissions (hydrostatic)                             |

## Custom Content Section

Not applicable.