



Australian Government

Department of Education, Employment and Workplace Relations

AUR21011 Certificate II in Motorsport

Release: 2

AUR21011 Certificate II in Motorsport

Modification History

One new AUR unit of competency:
AURTTE3001

One imported unit of competency updated:
MEM05017D replaces MEM05017C

Description

This qualification covers the skills and knowledge required to perform basic mechanical servicing and repairs for motorsport vehicles. It is suitable for entry into the motorsport industry.

Job roles/employment outcomes

The AUR21011 Certificate II in Motorsport offers training for individuals to perform vehicle servicing in a motorsport environment.

Employment outcomes targeted by this qualification include:

- a junior member or general hand within a race team.

Application

This qualification is typically used to develop employees or recognise and develop existing workers who are performing vehicle service and repair functions in a motorsport environment.

They would be expected to perform a range of mechanical operations involving known routines, methods and procedures and take some accountability for the quality of outcomes.

Training programs for this qualification are suitable to be undertaken as part of a formal training contract with an employer under an Australian Traineeship arrangement.

Pathways Information

Pathways into the qualification

This qualification may be accessed by direct entry. Credit may be granted towards this qualification by those who have completed AUR10105 Certificate I in Automotive in this Training Package or other relevant qualifications. Credit for this qualification may also include units contained within relevant skill sets.

Pathways from the qualification

Further training pathways from this qualification include AUR30911 Certificate III in Motorsport, AUR30408 Certificate III in Automotive Mechanical Technology or other relevant qualifications.

Licensing/Regulatory Information

Licensing considerations

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

Entry Requirements

Not Applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

The following table contains a summary of the Employability Skills as identified by the Motorsport 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 | <ul style="list-style-type: none"> • understanding and carrying out verbal instructions from supervisors and others • reading and understanding workplace documents • completing written workplace documentation, forms and records • sharing work-related information with other team members • communicating with people from a range of social, cultural and ethnic backgrounds • seeking and acting upon feedback • using industry terminology |
| Teamwork | <ul style="list-style-type: none"> • contributing positively to the work team environment • working effectively with others in a socially diverse environment • respecting and understanding the views of others • giving and receiving feedback • identifying and describing own role and role of others |
| Problem-solving | <ul style="list-style-type: none"> • recognising a problem or a potential problem within a motorsport environment • seeking information and assistance to solve problems outside own area of responsibility • solving problems within own area of responsibility |
| Initiative and enterprise | <ul style="list-style-type: none"> • making adjustments to improve own performance • suggesting ideas for workplace improvement to supervisors and team members • positively adapting to changes in workplace procedures or arrangements • taking positive action to report hazards or risk situations to supervisors |
| Planning and organising | <ul style="list-style-type: none"> • understanding how own job role fits into the wider workplace context • planning daily work tasks to work safely and manage risks according to workplace procedures • prioritising activities to achieve required outcomes • planning and organising appropriate equipment and materials |

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

| | |
|-----------------|--|
| Self-management | <ul style="list-style-type: none">• following workplace safety requirements and other policies and procedures• managing own time• completing known delegated tasks on time• completing non-routine tasks as requested• selecting and using appropriate equipment, materials, processes and procedures• asking for advice and assistance |
| Learning | <ul style="list-style-type: none">• identifying personal strength and weaknesses• positively accepting opportunities to learn• acting upon feedback to improve work performance• asking questions to gain information• identifying sources of information to expand knowledge and understanding |
| Technology | <ul style="list-style-type: none">• appropriately selecting and using tools and equipment• recognising and reporting faulty equipment• using information and communication technology |

Packaging Rules

Packaging Rules

To be awarded the AUR21011 Certificate II in Motorsport, competency must be achieved in **fifteen (15)** units of competency.

- **five (5)** core units of competency
- **ten (10)** elective units of competency, as specified below:
 - a minimum of seven (7) elective units from Group A
 - a maximum of three (3) elective units from Group B, drawn in any combination from:
 - units not already chosen from Group A
 - relevant units available in this Training Package, other endorsed Training Packages and accredited courses, where those unit are available for inclusion at Certificate II and III
 - a maximum of **two (2)** units of competency may be at Certificate III.

Note: Where prerequisite units are identified they must be counted in the total number of units required for completion of the qualification.

The following units of competency must not be chosen together when achieving this qualification:

| | |
|-------------|-------------------------------------|
| MEM05003B | Perform soft soldering |
| AURV223808A | Carry out soft soldering techniques |

| | |
|-------------|---|
| MEM05004C | Perform routine oxy acetylene welding |
| AURV223608A | Carry out oxy acetylene welding, thermal cutting and thermal heating procedures |

| | |
|-------------|---|
| MEM05007C | Perform manual heating and thermal cutting |
| AURV223608A | Carry out oxy acetylene welding, thermal cutting and thermal heating procedures |

| | |
|-------------|--|
| MEM05017D | Weld using gas metal arc welding process |
| AURV281308A | Carry out gas metal arc (MIG) welding procedures |

Core units of competency

- Complete the following **five (5)** units of competency.

| Unit code | Unit title |
|-------------|---|
| AURC270103A | Apply safe working practices |
| AURT271781A | Implement and monitor environmental regulations in the automotive mechanical industry |
| AURM240080B | Operate in a motorsport environment |
| AURM240172B | Set up and dismantle temporary work location and equipment |
| MSAENV272B | Participate in environmentally sustainable work practices |

Elective units of competency**Group A: Electives**

- Complete a minimum of **seven (7)** units of competency from the following lists.

Brakes

| Unit code | Unit title |
|-------------|--|
| AURT210170A | Inspect and service braking systems |
| AURT210605A | Attach friction materials and radius grind |
| AURT210736A | Machine brake drums and brake disc rotors |

Electrical

| Unit code | Unit title |
|-------------|---|
| AURE218664A | Remove and replace electrical/electronic units/assemblies |
| AURE218670A | Service, maintain or replace batteries |
| AURE218676A | Test, service and charge batteries |
| AURE218708A | Carry out repairs to single electrical circuits |
| AURE218764A | Remove, refit and test electrical componentry for normal operation following body repair activities |
| AURE219331A | Install, test and repair low voltage wiring/lighting systems |

| Unit code | Unit title |
|-------------|---|
| AURE219531A | Install ancillary electrical components |
| AURE220140A | Manufacture and repair wiring harness/looms |
| AURE224008A | Carry out soldering of electrical wiring/circuits |

Engines, systems and transmissions

| Unit code | Unit title | Prerequisites |
|-------------|---|-------------------------------------|
| AURT201164A | Remove and install engine assemblies | |
| AURT201170A | Inspect and service engines | |
| AURT202166B | Repair cooling systems | |
| AURT202170B | Inspect and service cooling systems | |
| AURT202608A | Carry out radiator repairs | |
| AURT203170B | Service petrol fuel systems | |
| AURT204670A | Inspect and service emission control systems | |
| AURT205123A | Fabricate exhaust system/components | |
| AURT205166A | Repair exhaust system components | |
| AURT206670A | Inspect and service transmissions (manual) | |
| AURT207170A | Inspect and service transmissions (automatic) | |
| AURT212670A | Service final drive assemblies | |
| AURT213170A | Service final drive (driveline) | |
| AURTE3001 | Apply knowledge of engine science | |
| MEM07005C | Perform general machining | MEM09002B MEM12023A MEM18001C |

General mechanical

| Unit code | Unit title |
|-----------|------------|
|-----------|------------|

| Unit code | Unit title |
|-------------|--|
| AURC252103A | Apply basic automotive troubleshooting processes |
| AURT200108A | Carry out servicing operations |
| AURT225156A | Read and interpret engineering drawings |
| AURT225191A | Produce drawings from design concepts |
| AURT225667A | Use and maintain measuring equipment |
| AURT270278A | Use and maintain workplace tools and equipment |
| AURV224508A | Carry out fabrication of components |
| MEM09002B | Interpret technical drawing |
| MEM12023A | Perform engineering measurements |
| MEM18001C | Use hand tools |
| MEM30012A | Apply mathematical techniques in a manufacturing, engineering or related environment |

Motorsport

| Unit code | Unit title |
|-------------|---|
| AURM240173A | Transport a light competition vehicle and support equipment |
| AURM240174A | Prepare and service a light competition vehicle |

Motorsport officiating

| Unit code | Unit title |
|------------|---|
| AURMO2001A | Develop and update motorsport industry knowledge |
| AURMO2002A | Follow motorsport safety and risk management procedures |
| AURMO2003A | Comply with motorsport rules and regulations when officiating |
| AURMO2004A | Assist with motorsport officiating duties |

Steering and suspension

| Unit code | Unit title |
|-------------|--|
| AURT215130A | Inspect steering systems |
| AURT215170A | Inspect and service steering systems |
| AURT216130A | Inspect suspension systems |
| AURT216170A | Inspect and service suspension systems |

Tyres, rims and wheels

| Unit code | Unit title |
|-------------|---|
| AURT217606A | Balance wheels and tyres |
| AURT217665A | Remove, fit and inspect wheel assemblies |
| AURT217668A | Select tyres and rims for specific applications (light) |
| AURT217766A | Remove, inspect, repair and fit tyres and tubes (light) |

Welding

| Unit code | Unit title | Prerequisites |
|-------------|---|---------------|
| AURV223608A | Carry out oxy acetylene welding, thermal cutting and thermal heating procedures | |
| AURV223808A | Carry out soft soldering techniques | |
| AURV281108A | Carry out manual metal arc welding procedures | |
| AURV281208A | Carry out brazing procedures | |
| AURV281308A | Carry out gas metal arc (MIG) welding procedures | |
| AURV281408A | Carry out gas tungsten arc (TIG) welding procedures | |
| AURV281508A | Carry out spot welding procedures | |
| AURV323908A | Carry out thermoplastic welding procedures | |
| MEM05003B | Perform soft soldering | |

| Unit code | Unit title | Prerequisites |
|-----------|--|---|
| MEM05004C | Perform routine oxy acetylene welding | |
| MEM05007C | Perform manual heating and thermal cutting | |
| MEM05050B | Perform routine gas metal arc welding | |
| MEM05017D | Weld using gas metal arc welding process | MEM05050B MEM05051A MEM05052A MEM12023A MEM18001C MEM18002B MEM09002B |

Group B: Other electives

The balance of units, to a maximum of **three (3)**, may be drawn in any combination from:

- units not already chosen from Group A above
- relevant units available in this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Certificate II and III.