



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **AUR30511 Certificate III in Marine**

**Release: 2**

## AUR30511 Certificate III in Marine

### Modification History

Packaging rules amended. Maximum number of electives for Group B and has been amended from 11 to 10.

**Three new AUR units of competency:**

AURTTE3001  
AURTTM3001  
AURTTM3002

**Four AUR units of competency updated:**

AURTTM3003 replaces AURT301357A  
AURTTM3004 replaces AURT301383A  
AURTTM3008 replaces AURT301383A  
AURTTM3011 replaces AURT301483A

**Seven imported units of competency updated:**

CUVACD303A replaces CUVCRS04B  
TLID1001A replaces TLID107C  
TLID2004A replaces TLID407C  
TLID2010A replaces TLID1007C  
TLID2013A replaces TLID1307C  
TLID3011A replaces TLID1107C  
TLILIC2001A replaces TLILIC108A

### Description

This qualification covers the skills and knowledge required to perform a range of mechanical service and repair tasks within the marine industry. It is suitable for entry into the marine retail, service and repair sector.

***Job roles/employment outcomes***

The employment outcomes of AUR30511 Certificate III in Marine would see an individual working in the marine mechanical service and repair industry.

The marine mechanic would be typically involved in tasks involving a specialised range of methods, tools, materials and information, and be required to provide and pass on solutions to predictable and unpredictable problems. Some complex and non-routine activities involving individual responsibility and judgement in known contexts and within established parameters may be expected.

***Application***

This qualification is suitable for an Australian Apprenticeship pathway.

## Pathways Information

### *Pathways into the qualification*

This qualification may be accessed by direct entry. Credit will be granted towards this qualification by those who have completed AUR20611 Certificate II in Marine, 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 AUR40208 Certificate IV in Automotive 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 Marine service and repair 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"> <li>• using technical information and manufacturer information</li> <li>• collecting, analysing and organising information</li> <li>• communicating ideas and information</li> <li>• completing workplace reports</li> <li>• communicating ideas and information with workplace colleagues</li> <li>• using and contributing to workplace documentation</li> <li>• maintaining workplace records</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>• identifying and describing own role and role of others</li> <li>• working within a team</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• recognising a problem or a potential problem within a marine component or system, or with equipment</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>• solving problems within area of responsibility</li> <li>• identifying and isolating faults in equipment</li> <li>• using a range of problem-solving techniques</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>• making adjustments to improve performance of marine components, systems or equipment</li> <li>• determining problems needing action</li> <li>• recommending required action</li> <li>• reporting problems outside area of responsibility</li> <li>• distinguishing between causes of faults</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• prioritising actions to achieve required outcomes</li> <li>• planning own work requirements and assisting others to plan theirs</li> <li>• planning and organising appropriate equipment and tools</li> <li>• identifying tasks to achieve team goals</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>• operating within appropriate time constraints and work standards</li> <li>• selecting and using appropriate equipment, materials, processes</li> </ul>

**EMPLOYABILITY SKILLS QUALIFICATION SUMMARY**

	<ul style="list-style-type: none"><li>and procedures</li><li>• applying workplace procedures</li><li>• recognising limitations and seeking timely advice</li><li>• planning own work requirements</li><li>• identifying resource requirements</li></ul>
Learning	<ul style="list-style-type: none"><li>• asking questions to gain information</li><li>• identifying sources of information to expand knowledge 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>
Technology	<ul style="list-style-type: none"><li>• operating and adjusting marine components, systems or equipment</li><li>• setting up equipment and work area</li><li>• selecting and using appropriate equipment and materials</li></ul>

## Packaging Rules

### Packaging Rules

To be awarded the AUR30511 Certificate III in Marine, competency must be achieved in **thirty (30)** units of competency.

- **five (5)** core units of competency
- **twenty five (25)** elective units of competency, as specified below:
  - a minimum of **fifteen (15)** specialist elective units drawn from Group A
  - a maximum of **ten (10)** elective units from Group B, drawn in any combination from:
    - units not already chosen from Group A
    - Group B units listed
    - up to **five (5)** relevant units available in this Training Package, other endorsed Training Packages and accredited courses, where those units are aligned to Certificates II, III and IV
  - a maximum of **sixteen (16)** units of competency may be selected where they are available at Certificate II
  - a maximum of **two (2)** units of competency may be selected where they are available at Certificate IV.

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

The following pairs of units 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
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AURV281308A	Carry out gas metal arc (MIG) welding procedures
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### Core units of competency

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

Unit code	Unit title
AURC270103A	Apply safe working practices
AURR371181A	Implement and monitor environmental regulations in the marine repair industry
AURT270278A	Use and maintain workplace tools and equipment
AURT366108A	Carry out diagnostic procedures
MSAENV272B	Participate in environmentally sustainable work practices

### Elective units of competency

#### Group A: Specialist electives units

- Complete a minimum of **fifteen (15)** units of competency from the following list.

Unit code	Unit title
AURE320031B	Install marine electrical systems and components
AURE320066B	Diagnose and repair marine electrical systems and components
AURE321831B	Install marine electronic systems and components
AURE321832A	Test, diagnose and repair marine electronic systems and components
AURR201103A	Service outboard engines and components
AURR201104A	Service inboard engines and components
AURR207670B	Service marine outboard and stern drive transmissions
AURR207770B	Service marine inboard transmissions
AURR213670A	Service inboard propeller drive systems
AURR214170B	Service jet drive propulsion systems

Unit code	Unit title
AURR246870B	Service deck, hull and cabin equipment
AURR301102A	Diagnose and repair outboard engines and components
AURR301105A	Diagnose and repair inboard engines and components
AURR307684B	Diagnose and repair marine outboard and stern drive transmissions
AURR307784B	Diagnose and repair marine inboard transmissions
AURR313631A	Install inboard propeller drive systems
AURR313684B	Diagnose and repair inboard propeller drive systems
AURR314131B	Install jet drive propulsion systems
AURR314166B	Diagnose and repair jet drive propulsion systems
AURR346108B	Carry out hull repairs
AURR346131B	Install marine engines, controls and instruments
AURR346267A	Diagnose and repair marine steering systems
AURR346336A	Launch and recover a vessel using a trailer
AURR346435B	Launch and recover vessel from crane, gantry and forklift
AURR346543A	Moor a motor driven vessel
AURR346650A	Winterise vessel and engine systems
AURR346660B	Recommission vessel systems
AURR346760B	Recommission marine engine systems
AURR346866B	Repair deck, hull and cabin equipment
AURR346931A	Water test a vessel
AURR346975B	Water test engines in tanks
AURR401103A	Overhaul two and four cycle outboard engines

### Group B: Other electives



- Complete a maximum of **ten (10)** units of competency, drawn in any combination from:
  - units not already chosen from Group A
  - Group B units listed below
  - a maximum of **five (5)** relevant units may be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are aligned to Certificates II, III and IV.

### Brakes

Unit code	Unit title
AURT210170A	Inspect and service braking systems
AURT310166A	Repair hydraulic braking systems
AURE311666A	Repair electric braking systems

### 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
AURE219331A	Install, test and repair low voltage wiring/lighting systems
AURE219531A	Install ancillary electrical components
AURE220140A	Manufacture and repair wiring harness/looms
AURE224008A	Carry out soldering of electrical wiring/circuits
AURE318866A	Repair electrical systems
AURE318966A	Repair instruments and warning systems
AURE319145A	Overhaul charging system alternators
AURE319166B	Repair charging systems
AURE319245A	Overhaul starting motors

Unit code	Unit title
AURE319266B	Repair starting systems

**Electronics**

Unit code	Unit title
AURE321171A	Service and repair electronic spark ignition engine management systems
AURE321771A	Service and repair electronic compression ignition engine management systems
AURE321971A	Inspect, service and repair electronic management, monitoring and tracking systems

**Electrical ancillary systems and accessories - ignition**

Unit code	Unit title
AURE320666B	Repair ignition systems

**Engines, systems and transmissions**

Unit code	Unit title
AURT200368A	Select and use bearings, seals, gaskets, sealants and adhesives
AURT201164A	Remove and install engine assemblies
AURT201170A	Inspect and service engines
AURT202166B	Repair cooling systems
AURT202170B	Inspect and service cooling systems
AURT203170B	Service petrol fuel systems
AURT203670B	Service diesel fuel injection systems
AURT205123A	Fabricate exhaust system/components
AURT205166A	Repair exhaust system components
AURT303166B	Repair petrol fuel systems

Unit code	Unit title
AURT303666A	Repair diesel fuel systems
AURT304666A	Repair and replace emission control systems
AURT305671A	Inspect and repair engine forced induction systems
AURT306170A	Inspect, service and/or repair clutch assemblies and associated operating system components
AURT403145B	Overhaul petrol fuel system components
AURT403645A	Overhaul diesel fuel injection systems
AURTTTE3001	Apply knowledge of engine science
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
AURTTM3008	Dismantle and evaluate engine blocks and sub-assemblies
AURTTM3011	Recondition engine cylinder heads

### Environmental and sustainability

Unit code	Unit title
AURC272003A	Apply environmental regulations and best practice in a workplace or business
AURR271103A	Apply environmental regulations in the marine service industry
AURT271781A	Implement and monitor environmental regulations in the automotive mechanical industry
AURT471782A	Plan and manage compliance with environmental regulations in the mechanical repair industry
MSAENV472B	Implement and monitor environmentally sustainable work practices

### General mechanical

Unit code	Unit title
AURC252103A	Apply basic automotive troubleshooting processes
AURT200108A	Carry out servicing operations
AURT225667A	Use and maintain measuring equipment
AURT309166A	Repair hydraulic systems
AURT366308A	Carry out advanced diagnostic procedures
AURT466208A	Carry out diagnosis of complex system faults

**Common**

Unit code	Unit title
AURC251179A	Write routine texts in the workplace and complete automotive documentation
AURC251356A	Read in the workplace
AURC251677A	Use numbers in the workplace
AURC252327A	Identify, clarify and resolve problems
AURC261314A	Contribute to quality work outcomes
AURC270889A	Communicate business information
AURC270688A	Work effectively with others
AURC270789A	Communicate effectively in the workplace
AURC359350A	Conduct information sessions
AURC361101A	Adapt work processes to new technologies
AURC361337A	Maintain quality systems
AURC359554A	Provide technical guidance
AURC361230A	Inspect technical quality of work
BSBCMN311B	Maintain workplace safety
BSBFLM312C	Contribute to team effectiveness

Unit code	Unit title
BSBWOR202A	Organise and complete daily work activities
BSBWOR301A	Organise personal work priorities and development
CUVACD303A	Produce technical drawings
HLTFA301B	Apply first aid
MEM09002B	Interpret technical drawing
MEM12023A	Perform engineering measurements
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
TAEDEL301A	Provide work skill instruction

**Sales, warehousing, purchasing and storage**

Unit code	Unit title
TLID2010A	Operate a forklift
TLILIC2001A	Licence to operate a forklift truck
TLID3011A	Conduct specialised forklift operations
TLID1001A	Shift materials safely using manual handling methods
TLID2004A	Load and unload goods/cargo
TLID2013A	Move materials mechanically using automated equipment

**Steering**

Unit code	Unit title
AURT215130A	Inspect steering systems

**Trailers**

Unit code	Unit title
AURT237272	Service and repair trailers up to 4.5 tonnes

Unit code	Unit title
AURT337119A	Drive and manoeuvre trailer(s)

### 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	
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