



**Australian Government**

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

**TDM30207 CERTIFICATE III IN  
TRANSPORT & DISTRIBUTION  
(MARINE ENGINE DRIVING - GRADE  
2)**

**Release: 1**

## **TDM30207 CERTIFICATE III IN TRANSPORT DISTRIBUTION(MARINE ENGINE DRIVING - GRADE 2)**

### **Modification History**

Not applicable.

### **Description**

**Rationale:** A qualification aligned to the educational requirements for certification as a Marine Engine Driver Grade 2 as described in Part D of the National Standard for Commercial Vessels (NSCV).

Successful completion will require competency in units that relate to work defined as characteristics of AQF Certificate 3:

*'Performance of a defined range of skilled operations, usually within a range of broader related activities involving known routines, methods and procedures, where some discretion and judgement is required in the selection of equipment, services or contingency measures and within known time constraints. Applications may involve some responsibility for others. Participation in teams including group or team coordination may be involved'.*

### **Pathways Information**

Not applicable.

### **Licensing/Regulatory Information**

Not applicable.

### **Entry Requirements**

Not applicable.

## Employability Skills Summary

### Employability Skills Summary for TDM30207 Certificate III in Transport & Distribution (Marine Engine Driving - Grade 2)

The following table contains a summary of the employability skills as identified by the maritime industry for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on packaging options.

<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
<b>Communication</b>	<ul style="list-style-type: none"> <li>• Establish and implement vessel's engine room communication systems and procedures</li> <li>• Listen to and interpret verbal information related to the operation, maintenance and management of the hull, propulsion and auxiliary plant and systems on a coastal vessel of less than 750 kW propulsion power</li> <li>• Read and interpret maritime regulations, engineering drawings, gauges and instrument readings, vessel's safety management system, vessel and equipment manufacturer's instructions, etc.</li> <li>• Speak clearly and directly on a range of matters related to vessel's engine room operations, maintenance and management</li> <li>• Write simple reports and complete forms on vessel and engine room operations and maintenance, safety incident reports, entries in vessel's engine room records, etc.</li> <li>• Negotiate issues with others in the course of vessel operations</li> <li>• Recognise and interpret non-verbal signs, signals and behaviour</li> <li>• Interpret and record observations and equipment readings and displays</li> <li>• Communicate with multilingual crew</li> <li>• Use engine room communication equipment</li> </ul>
<b>Teamwork</b>	<ul style="list-style-type: none"> <li>• Provide leadership to engine room personnel on the vessel</li> <li>• Manage the resolution of any interpersonal conflicts that may arise on board the vessel</li> <li>• Motivate crew members</li> <li>• Assist crew members to achieve and maintain competency</li> <li>• Avoid and prevent harassment of others on the vessel</li> <li>• Collaborate with crew members in the course of vessel</li> </ul>

<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
	operations <ul style="list-style-type: none"><li>• Manage crew members of different ages, genders, race, religion, political persuasion, etc.</li></ul>

<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
<b>Problem solving</b>	<ul style="list-style-type: none"> <li>• Identify and solve or report problems arising in the course of vessel operations</li> <li>• Monitor and anticipate problems that may occur in the course of engine room operations including hazards and risks and take appropriate action (e.g. strategies for the avoidance of engine room fire and explosion, avoidance of hazards in the engine room space, etc.)</li> <li>• Manage hazards and risks in a range of operational situations (e.g. engine room hazards, crew working in confined spaces, engine room operations in heavy weather and seas, etc.)</li> <li>• Use advanced diagnostic and analysis techniques required when managing maintenance program for propulsion, electrical and auxiliary systems on a coastal vessel of less than 750 kW propulsion power in conjunction with the master and other crew members</li> <li>• Use mathematics to solve problems such as calculations related to engine and equipment performance and maintenance, safe working limits of equipment and calculations related to electrical system operations, fault finding and maintenance</li> </ul>
<b>Initiative and enterprise</b>	<ul style="list-style-type: none"> <li>• Modify activities dependent on differing work situations and contingencies such as changes in the weather and sea conditions, plant and equipment breakdown and emergency situations including fire, flooding or failure of steering, propulsion or auxiliary systems</li> <li>• Take appropriate initiatives in complex and diverse situations such as those above</li> <li>• Manage engine room responses to any changes in vessel's equipment, standard operating procedures and the vessel's working environment</li> </ul>
<b>Planning and organising</b>	<ul style="list-style-type: none"> <li>• Establish operational and emergency plans, systems and procedures for the engine room on the vessel, including safety management system and emergency procedures</li> <li>• Establish and implement systems and procedures for maintaining compliance with regulations and codes of practice</li> <li>• Monitor and evaluate operational performance and compliance</li> <li>• Collect, manage and interpret information needed to plan and organise engine room operations</li> <li>• Organise and plan own management activities as a Marine Engine Driver Grade 2</li> </ul>

<b>Employability Skill</b>	<b>Industry/enterprise requirements for this qualification include:</b>
	<ul style="list-style-type: none"> <li>• Manage time and priorities in the course of management activities on the vessel</li> </ul>
<b>Self-management</b>	<ul style="list-style-type: none"> <li>• Interpret and apply regulations, survey requirements, standard procedures and codes of practice as they apply to the engine room operations on a vessel, including OH&amp;S, environmental protection, security and SOLAS requirements</li> <li>• Establish and follow own work plans and schedules</li> <li>• Evaluate and monitor own work and performance as a Marine Engine Driver Grade 2</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>• Plan and organise learning and assessment activities for engine room personnel on a vessel, including emergency drills, safety and security awareness training, and continuing professional development of crew members</li> <li>• Manage adaptation of crew members to any changes in the vessel's systems, equipment, procedures and the vessel's operating environment (e.g. sea and weather conditions)</li> <li>• Instruct, coach or mentor other crew members on the vessel</li> <li>• Contribute to the assessment of the competency of other crew members</li> <li>• Assist in creating a learning environment on board the vessel</li> <li>• Adapt own competency to any changes in the vessel type, its equipment and its operating environment</li> <li>• Update own knowledge and skills required for engine room management activities</li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>• Operate equipment and systems including propulsion and auxiliary systems, and other engine room equipment and systems, etc. on a coastal vessel of less than 750 kW propulsion power</li> <li>• Establish and implement operational and maintenance systems for the vessel's hull, propulsion and auxiliary systems, safety equipment and various engine room facilities</li> <li>• Establish safety management system and OH&amp;S procedures for use and maintenance of engine room plant, equipment and facilities</li> <li>• Manage the preventative and remedial maintenance of vessel's hull, structures and engine room plant, equipment and tools on a coastal vessel of less than 750 kW propulsion power</li> </ul>

## Packaging Rules

### Requirements for completion of the qualification:

A successful outcome of the **seventeen** units of competency listed below.

Additional units from those listed below or relevant units from this or other Training Packages <sup>Note 4</sup> may be included in the qualification to satisfy specific additional needs beyond the minimum requirements. (They may also be achieved separately, either individually or in skill sets, leading to a National Statement of Attainment as described elsewhere in the Training Package)

MANDATORY REQUIREMENTS FIELD		UNIT	
<b>B</b>	<b>Equipment Checking and Maintenance</b>	TDMMB1907B	Carry out basic hull servicing
		TDMMB2907B	Recognise and correct deteriorated fittings and machinery
<b>E</b>	<b>Communication</b>	TDMME1107A	Contribute to effective communications and teamwork on a coastal vessel <sup>Note 1</sup>
<b>F</b>	<b>Operational Quality and Safety</b>	TDMMF1007B	Provide elementary first aid
		TDMMF1107B	Survive at sea in the event of vessel abandonment
		TDMMF2707B	Prevent, control and fight fires on board a small vessel
		TDMMF4007B	Carry out basic operational engineering calculations
		TDMMF5407A	Observe safety and emergency procedures on a coastal vessel <sup>Note 2</sup>
		TDMMF5507A	Fight and extinguish fires on board a coastal vessel

			Note 3
<b>R</b>	<b>Carry Out Operations on Equipment and Systems</b>	TDMMR1807B	Operate deck machinery installed on a small vessel of less than 750 kW propulsion power
		TDMMR1907B	Safety handle and stow explosive and flammable materials
		TDMMR2707B	Operate and maintain marine internal combustion engines within the limits of responsibility of a Marine Engine Driver Grade 2
		TDMMR2807B	Operate and maintain auxiliary systems on vessels within the limits of responsibility of a Marine Engine Driver Grade 2
		TDMMR2907B	Operate and maintain marine low and medium voltage electrical systems
		TDMMR5407B	Carry out refuelling and fuel transfer operations
		TDMMR6107A	Use and care for hand and power tools on a small vessel
<b>U</b>	<b>Environment</b>	TDMMU507B	Ensure compliance with environmental considerations in a small domestic vessel

**Note 1:** TDMMR1107A is a **new unit** incorporating the requirements of the previous two units *TDMMR101A Understand orders and be understood in relation to shipboard duties* and *TDMMR201A Contribute to effective human relationships on board a vessel* (as they apply to coastal vessel operations).

**Note 2:** TDMMR5407A is a **new unit** incorporating the requirements of the previous two units *TDMMR701B Observe safe working practices* and *TDMMR801B Comply with emergency procedures*.



**Note 3:** TDMMF5507A is a **new unit** incorporating the requirements of the previous two units *TDMMF5302A Fight and extinguish fires on board a commercial vessel* and *TDMMF1201A Minimise the risk of fire and maintain a state of readiness to respond to emergency situations involving fire*.

**OPTIONAL ADDITIONAL UNITS TO MINIMUM REQUIREMENTS**

The units listed below or relevant units from this or other Training Packages <sup>Note 4</sup> may be included in the qualification to satisfy specific additional needs beyond the minimum mandatory requirements.

<b>O</b>	<b>Security</b>	TDMMO107 A	Follow maritime security procedures
<b>Optional imported units from the Business Services Training Package BSB01</b>		Implement continuous improvement	
		Provide workplace information and resourcing plans	
		Contribute to team effectiveness (Previous unit discontinued – nearest fit at Certificate III level)	

**Note 4:** Where units of competency are included from another Training Package, Registered Training Organisations should check the National Training Information System (NTIS) or contact the Industry Skills Council responsible for the Training Package to check if the unit has any pre-requisite or co-requisite requirements.