



Australian Government

MAR50113 Diploma of Maritime Operations (Marine Engineering Class 3)

Release 1

MAR50113 Diploma of Maritime Operations (Marine Engineering Class 3)

Modification History

Release 1	This is the first release of this qualification in the MAR13 Maritime Training Package. This qualification replaces TDM50407 Diploma of Transport Distribution (Coastal Marine Engineering - Engineer Class 3).
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Description

This qualification is suitable for people who work in the maritime industry as an Engineer Class 3 on ships powered by main propulsion machinery of any propulsion power in any operating area, or as a second engineer on a vessel of less than 3000 kW operating in near coastal waters.

Pathways Information

Pathways into the qualification

MAR40213 Certificate IV in Maritime Operations (Marine Engine Driver Grade 1)

Pathways from the qualification

MAR60113 Advanced Diploma of Maritime Operations (Marine Engineering Class 2)

Licensing/Regulatory Information

This qualification is currently cited as meeting some of the requirements for certification as an Engineer Class 3 as described in Marine Orders Part 3: Seagoing Qualifications under the Navigation Act 2012 by the Australian Maritime Safety Authority (AMSA).

Certification will require achievement of the MAR50113 Diploma of Maritime Operations (Marine Engineering Class 3) and other requirements; people seeking certification should check with AMSA.

Entry Requirements

There are no entry requirements for this qualification.

Employability Skills Summary

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.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	Correctly and accurately complete engineering reports, running sheets and other engineering documentation relevant to the performance of engineering duties Receive, read and clarify as required, messages concerning vessel safety and operations, and correctly interpret and apply to engineering activities Use appropriate techniques when communicating with multilingual crew to ensure communication is effective and messages are clearly understood
Teamwork	Account for personnel involved and equipment used Seek Master's advice when challenges are beyond own scope of technical competence or when input from environmental specialist may be required Use appropriate strategies to foster the trust and confidence of stakeholders
Problem-solving	Identify and implement control measures to mitigate risk Identify difficult situations and negotiate solutions using a collaborative approach Respond to complaints and requests for information from authorities and authorised personnel
Initiative and enterprise	Identify precautions during entry to protect occupants Recognise unusual situations, unexpected risks/hazards and potential/actual environmental incidents Report opportunities and recommendations for improvements
Planning and organising	Identify, collate and process information required to prepare verbal and written reports Monitor the implementation of environmental management plans, policy and procedures, and specified work methods Prepare appropriate plan for completion of work activity in confined

	space
Self-management	Assess own work outcomes and maintain knowledge of current codes, standards, regulations and industry practices Clarify own scope of authority/responsibility for achieving specific environmental outcomes for the vessel and the roles of other key personnel Impart knowledge and ideas as required through oral, written and visual means
Learning	Develop and provide information and training to ensure all crew members understand their environmental obligations/responsibilities Effectively provide feedback, instruction and training on work performance to engine room crew according to vessel procedures and established engineering practice Monitor effectiveness of the information and training, and provide additional information/training as required
Technology	Use atmospheric detection equipment and interpret the readings Use computer and relevant equipment to enter, access and retrieve engineering information Store records to enable easy access and review by authorised personnel according to regulatory and organisational requirements

Packaging Rules

Total number of units = 20 units

20 core units

Core units			
Field			
A	Handling Cargo and Vessel Stability	MARA3001A	Contribute to safe cargo operations on liquefied gas tankers
		MARA3002A	Contribute to safe cargo operations on oil and chemical tankers
B	Equipment Checking and Maintenance	MARB5001A	Maintain and repair marine electrical and electronic equipment
		MARB5002A	Maintain and repair shipboard machinery and equipment

C	Equipment Operations	MARC5001A	Employ tools, equipment and materials in a shipboard context
E	Communication	MARE5001A	Communicate effectively when performing engineering duties
F	Operational Quality and Safety	MARF3007A	Work safely in confined spaces on a vessel
J	Environment	MARJ5001A	Ensure compliance with environmental management legislation
L	Marine Engineering	MARL5001A	Apply basic principles of marine electrotechnology
		MARL5002A	Apply basic principles of marine engineering thermodynamics
		MARL5003A	Apply basic principles of marine mechanics
		MARL5004A	Apply basic principles of naval architecture
		MARL5005A	Demonstrate basic knowledge of marine auxiliary boilers
		MARL5006A	Demonstrate basic knowledge of marine auxiliary machinery and systems
		MARL5007A	Demonstrate basic knowledge of marine control systems and automation
		MARL5008A	Demonstrate basic knowledge of marine diesel engines and systems
		MARL5009A	Demonstrate basic knowledge of marine electrical systems
		MARL5010A	Demonstrate basic knowledge of marine steam turbines and main boilers
		MARL5011A	Demonstrate basic knowledge of ships and ship routines
		MARL5012A	Perform basic marine engineering calculations

Custom Content Section

Not applicable.