



Australian Government

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

Release 1

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

Modification History

Release 1	This is the first release of this qualification in the MAR13 Maritime Training Package. This qualification replaces TDM60307 Advanced Diploma of Transport Distribution (Marine Engineering - Class 2)
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Description

This qualification is suitable for people who work as an Engineer Class 2 in the maritime industry on ships powered by main propulsion machinery of any propulsion power in any operating area.

Pathways Information

Pathways into the qualification

MAR50113 Diploma of Maritime Operations (Marine Engineering Class 3)

MAR50213 Diploma of Maritime Operations (Engineer Watchkeeper)

Pathways from the qualification

MAR60313 Advanced Diploma of Maritime Operations (Marine Engineering Class 1)

Licensing/Regulatory Information

This qualification is currently cited as meeting some of the requirements for certification as an Engineer Class 2 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 MAR60113 Advanced Diploma of Maritime Operations (Marine Engineering Class 2) 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	Complete necessary documentation associated with confined space entry Read and interpret technical guides, manuals and information relevant to ship construction Use basic verbal and/or defined communication skills and signals when entering and working in confined spaces
Teamwork	Establish communication links with medical services using relevant communication equipment to ensure prompt control action is taken Provide instructions to crew and passengers to maximise chances of survival Select activities and tactics to combat the fire so that the safety of the vessel and all on board is not compromised
Problem-solving	Identify and apply relevant solutions for addressing problems associated with marine auxiliary boilers Identify and suggest ways of rectifying electrical hazards and emergency situations on a vessel Perform mathematical calculations to solve problems
Initiative and enterprise	Identify and interpret numerical and graphical information Impart knowledge and ideas through oral, written and visual means Recognise defective equipment and take appropriate action
Planning and organising	Identify, collate and process information required to perform basic calculations related to marine mechanics Plan an appropriate first aid response in line with established first aid principles, policies and procedures Prepare appropriate plan for completion of work activity in confined space
Self-management	Interpret and fulfil individual rights and responsibilities on board a vessel Recognise own role and responsibilities

	Undertake WHS/OHS housekeeping in own work area
Learning	Assess own work outcomes and maintain knowledge of current codes, standards, regulations and industry practices Identify WHS/OHS training needs of crew Practise realistic drills and musters to ensure pre-incident readiness of response personnel
Technology	Access online information on ship construction Use calculators to perform mathematical calculations Use electrical measuring and testing instruments

Packaging Rules

Total number of units = 18 units

18 core units

Core units			
Field			
F	Operational Quality and Safety	MARF1003A	Follow vessel security procedures
		MARF3002A	Observe personal safety and social responsibility
		MARF3005A	Prevent and fight fires on board a vessel
		MARF3006A	Survive at sea in the event of vessel abandonment
		MARF3007A	Work safely in confined spaces on a vessel
		MARF5002A	Provide medical first aid on board a vessel
L	Marine Engineering	MARL6001A	Apply intermediate principles of marine electrotechnology
		MARL6002A	Apply intermediate principles of marine engineering thermodynamics
		MARL6003A	Apply intermediate principles of marine mechanics
		MARL6004A	Apply intermediate principles of naval

			architecture
		MARL6009A	Demonstrate basic knowledge of ship construction
		MARL6010A	Demonstrate basic knowledge of ship operation and maintenance
		MARL6011A	Demonstrate intermediate knowledge of marine auxiliary boilers
		MARL6012A	Demonstrate intermediate knowledge of marine auxiliary machinery and systems
		MARL6013A	Demonstrate intermediate knowledge of marine control systems and automation
		MARL6014A	Demonstrate intermediate knowledge of marine diesel engines and systems
		MARL6015A	Demonstrate intermediate knowledge of marine electrical systems
		MARL6016A	Demonstrate intermediate knowledge of marine steam turbines and main boilers

Custom Content Section

Not applicable.