



Australian Government

Department of Education, Employment and Workplace Relations

**TDM60407 ADVANCED DIPLOMA OF
TRANSPORT & DISTRIBUTION
(MARITIME OPERATIONS - MASTER
UNLIMITED)**

Release: 1



TDM60407 ADVANCED DIPLOMA OF TRANSPORT DISTRIBUTION (MARITIMEOPERATIONS-MASTERUNLIMITED)

Modification History

Not applicable.

Description

Rationale: A qualification aligned to the educational requirements for certification as a Master (Unlimited) as described in Marine Orders Part 3: Seagoing Qualifications (Version 6) under the Navigation Act 1912.

Successful completion will require competency in units that relate to work defined as characteristics of AQF Certificate 6:

'The application of a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts in relation to either varied or highly specific functions. Contribution to the development of a broad plan, budget or strategy is involved and accountability and responsibility for self and others in achieving the outcomes is involved. Significant judgement is required in planning, design, technical or leadership/guidance functions related to products, services, operations or procedures'.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

Employability Skills Summary for TDM60407 Advanced Diploma of Transport & Distribution (Maritime Operations - Master Unlimited)

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	<ul style="list-style-type: none"> • Establish and implement vessel's communication systems and procedures • Listen to and interpret complex verbal information related to the operation, maintenance and management of the vessel • Read and interpret maritime regulations, charts, drawings, weather forecasts and charts, vessel's safety management system, vessel and equipment manufacturer's instructions, etc. • Speak clearly and directly on diverse and complex matters related to vessels operations, maintenance and management • Write complex documents including reports on vessel operations and maintenance, safety incident reports, entries in vessel's official log, etc. • Negotiate complex issues with others in the course of vessel operations • Recognise and interpret non-verbal signs, signals and behaviour • Interpret and record observations and equipment readings and displays • Communicate with multilingual crew • Use bridge communication equipment and GMDSS radio equipment
Teamwork	<ul style="list-style-type: none"> • Provide leadership to the crew of the vessel • Manage the resolution of any interpersonal conflicts that may arise on board the vessel • Motivate crew members • Assist crew members to achieve and maintain competency • Manage the avoidance and prevention of harassment of others on the vessel • Collaborate with crew members in the course of vessel operations

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

Employability Skill	Industry/enterprise requirements for this qualification include:
Problem solving	<ul style="list-style-type: none"> • Identify and solve or report complex problems arising in the course of vessel operations • Monitor and anticipate problems that may occur in the course of vessel operations including hazards and risks and take appropriate action (e.g. collision avoidance strategies, avoidance of navigational hazards, etc.) • Manage hazards and risks in complex and diverse situations (e.g. navigation hazards, crew working in confined spaces, navigating heavy weather and seas, etc.) • Use advanced diagnostic and analysis techniques required when managing maintenance program for vessel's propulsion, electrical and auxiliary systems in conjunction with the chief engineer and other crew members on the vessel • Use mathematics to solve complex problems such as vessel's stability and loading calculations, fixing of vessel's position, and planning and plotting a vessel's course
Initiative and enterprise	<ul style="list-style-type: none"> • Modify activities dependent on differing work situations and contingencies such as changes in the weather and sea conditions, different loading conditions and navigation in different waters • Take appropriate initiatives in complex and diverse situations such as those above • Manage responses to any changes in vessel's equipment, standard operating procedures and the vessel's working environment
Planning and organising	<ul style="list-style-type: none"> • Establish operational and emergency plans, systems and procedures for the vessel, including the vessel's safety management system and emergency procedures • Establish and implement systems and procedures for maintaining compliance with regulations and codes of practice • Establish and implement bridge resource management strategy • Monitor and evaluate operational performance and compliance • Collect, manage and interpret information needed to plan and organise operations • Organise and plan own management activities as master of the vessel • Manage time and priorities in the course of management activities on the vessel

Employability Skill	Industry/enterprise requirements for this qualification include:
Self-management	<ul style="list-style-type: none"> • Interpret and apply regulations, survey requirements, standard procedures and codes of practice as they apply to the vessel, including OH&S, environmental protection, security and SOLAS requirements • Establish and follow own work plans and schedules • Evaluate and monitor own work and management performance as master of the vessel
Learning	<ul style="list-style-type: none"> • Plan and organise learning and assessment activities on the vessel, including emergency drills, safety and security awareness training, and continuing professional development of crew members • 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) • Instruct, coach or mentor other crew members on the vessel • Contribute to the assessment of the competency of other crew members • Create a learning environment on board the vessel • Adapt own competency to any changes in the vessel type, its equipment and its operating environment • Update own knowledge and skills required for management activities
Technology	<ul style="list-style-type: none"> • Operate complex equipment and systems including vessel's propulsion and auxiliary systems, GMDSS radio systems, radar and other bridge and electronic navigation systems, etc. • Establish and implement operational and maintenance systems for the vessel's hull, propulsion and auxiliary systems, safety and deck equipment and other facilities on the vessel • Establish safety management system and OH&S procedures for use and maintenance of equipment and facilities • Manage the preventative and remedial maintenance of vessel's hull, plant, equipment and tools

Packaging Rules

Requirements for completion of the qualification:

A successful outcome of the **thirty-five** units of competency listed below.

Additional units from those listed below or relevant units from this or other Training Packages ^{Note 5} 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	
A	Handling Cargo and Vessel Stability	TDMMA107 B	Plan and ensure safe loading, stowage, securing and unloading of cargo
		TDMMA207 B	Plan and ensure safe care of cargo during a voyage
		TDMMA307 B	Plan and monitor the carriage of dangerous cargoes
		TDMMA707 B	Monitor the loading, stowage, security and unloading of cargo
		TDMMA807 B	Monitor the care of cargo during a voyage
		TDMMA1007 B	Control trim, stability and stress
B	Equipment Checking and Maintenance	TDMMB4307 B	Monitor and manage the seaworthiness of the vessel
C	Manoeuvre Vessel	TDMMC107B	Manoeuvre and handle a vessel of 500 gross tonnage or more under all conditions
		TDMMC207B	Operate remote controls of propulsion plant and engineering systems
		TDMMC307B	Manoeuvre and handle the vessel in normal conditions
E	Communication	TDMME207B	Communicate using standard marine vocabulary
		TDMME307B	Transmit and receive information by visual signalling

		TDMME507B	Transmit and receive information by marine radio or telephone
		TDMME807C	Transmit and receive information by GMDSS subsystem and equipment
F	Operational Quality and Safety	TDMMF107B	Assist in search and rescue operations
		TDMMF307B	Manage business and legal requirements on a vessel
		TDMMF407B	Maintain the operational condition of lifesaving, firefighting and other safety systems
		TDMMF507C	Develop emergency and damage control plans and handle emergency situations on board a vessel
		TDMMF607B	Organise and manage the provision of medical care on board a vessel
		TDMMF1007 B	Provide elementary first aid
		TDMMF1107 B	Survive at sea in the event of vessel abandonment
		TDMMF1807 B	Apply medical first aid on board a vessel
		TDMMF1907 B	Operate survival craft and other lifesaving appliances
		TDMMF2607 B	Establish watchkeeping arrangements and procedures
		TDMMF3007 B	Maintain a safe navigational watch
		TDMMF5607 A	Observe personal safety and social responsibilities ^{Note 1}
		TDMMF6107 A	Manage marine firefighting and prevention activities on board a vessel ^{Note 2}
TDMMF6207 A	Prevent, control and fight fires on board an ocean-going vessel ^{Note 3}		

H	Navigation	TDMMH107 B	Plan a voyage and conduct navigation
		TDMMH207 B	Determine position of the vessel and the accuracy of the resultant position
		TDMMH307 B	Manage safe navigation through the use of radar and other navigational aids
		TDMMH907 B	Forecast weather and oceanographic conditions
		TDMMH1807 A	Apply command navigation procedures on vessels (unlimited)

L	Human Resources	TDMML407A	Manage administration of the vessel and its personnel <small>Note 4</small>
U	Environment	TDMMU107 B	Monitor compliance with legislative requirements and measures to ensure protection of the environment

Note 1: TDMMF5607A is a **new unit** incorporating the requirements of the previous four units TDMMF701B Observe safe working practices, TDMMF801B Comply with emergency procedures, TDMML201A Contribute to effective human relationships on board a vessel and TDMME101A Understand orders and be understood in relation to shipboard duties

Note 2: TDMMF6107A is a **new unit** incorporating the requirements of the previous two units TDMMF1301A Manage marine firefighting and prevention activities and TDMMF2001A Prevent, control and fight fires on board a vessel

Note 3: TDMMF6207A is a **new unit** incorporating the requirements of the previous two units TDMMF901A Fight and extinguish fires and TDMMF1201A Minimise the risk of fire and maintain a state of readiness to respond to emergency situations involving fire

Note 4: TDMML407A is a **new unit** incorporating the requirements of the previous two units TDMML101A Organise and manage the crew and TDMMF3701A Manage vessel operations

OPTIONAL ADDITIONAL UNITS TO MINIMUM REQUIREMENTS

The units listed below or relevant units from this or other Training Packages Note 5 may be included in the qualification to satisfy specific additional needs beyond the minimum mandatory requirements (they may also be achieved separately, either individually or in skills sets, leading to a Statement of Attainment as described elsewhere in the Training Package).

Skills set of additional units to prepare for AMSA endorsement as responsible officer on a liquefied gas tanker

A	Handling Cargo and Vessel Stability	TDMMA407 B	Manage procedures for the handling, loading and discharging of liquefied gas cargoes
F	Operational Quality and Safety	TDMMF1407 B	Plan and implement special safety, maintenance and emergency procedures for liquefied gas tankers

Skills set of additional units to prepare for AMSA endorsement as responsible officer on a chemical tanker

A	Handling Cargo and Vessel Stability	TDMMA507 B	Manage procedures for the handling, loading and discharging of chemical cargoes
F	Operational Quality	TDMMF1507	Plan and implement special safety, maintenance and

and Safety	B	emergency procedures for chemical tankers
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Skills set of additional units to prepare for AMSA endorsement as responsible officer on an oil tanker

A	Handling Cargo and Vessel Stability	TDMMA607 B	Manage procedures for the handling, loading and discharging of oil cargoes
F	Operational Quality and Safety	TDMMF1607 B	Plan and implement special safety, maintenance and emergency procedures for oil tankers

A	Handling Cargo and Vessel Stability	TDMMA1607 B	Manage loading and embarkation procedures on roll-on roll-off vessels
H	Navigation	TDMMH1007 B	Navigate a high speed vessel
O	Security	TDMMO107 A	Follow maritime security procedures
		TDMMO207 A	Carry out ship security officer functions
Optional imported units from the Business Services Training Package BSB01		BSBFLM505 B	Manage operational plan
		BSBFLM506 B	Manage workplace information systems
		BSBFLM509 B	Facilitate continuous improvement
Optional imported units from the Training and Assessment Training Package TAA04		TAACMQ501 A	Develop training and/or assessment organisational policies and procedures
		TAADEL301 A	Provide training through instruction and demonstration of work skills
		TAAASS402 A	Assess competence
		TAAASS301	Contribute to assessment

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Note 5: 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.