



Australian Government

**Assessment Requirements for MARL036
Demonstrate advanced knowledge of ship
operation and maintenance**

Release: 1

Assessment Requirements for MARL036 Demonstrate advanced knowledge of ship operation and maintenance

Modification History

Release 1. New unit of competency.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least one occasion and include:

- accessing information required in routine and emergency situations
- applying relevant work health and safety/occupational health and safety (WHS/OHS) requirements and work practices
- assessing own work outcomes and maintaining knowledge of current codes, standards, regulations and industry practices
- ensuring currency of relevant legislative and regulatory knowledge
- explaining advanced concepts of ship operation and maintenance, and imparting knowledge and ideas verbally, in writing and visually
- identifying, interpreting and processing complex numerical and graphical information required to analyse marine engineering functions and shipboard engineering related problems
- identifying hazards and risks, and determining appropriate ways of responding to hazards, malfunctions and emergency situations
- identifying methods and procedures needed to perform duties such as preparing for dry-docking and statutory surveys
- planning and organising the resources needed to establish and maintain safety management systems on a tanker or gas carrier
- reading and interpreting legislation and regulations related to maritime operations.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- Australian maritime legislation
- classification societies
- dry docking:
 - procedures
 - responsibilities of engineering staff
- enclosed spaces
- flag State responsibilities
- hierarchy and organisational structure of shipboard personnel
- International Convention for the Prevention of Pollution from Ships (MARPOL)
- International Maritime Dangerous Goods (IMDG) Code requirements
- key international and Australian standards relating to shipping
- key shipping authorities and organisations
- maintenance strategies relating to classification surveys
- Port State Control
- regulatory framework impacting on commercial shipping operations
- relevant sections of maritime regulations, codes and conventions related to tankers and gas carriers
- repair and maintenance methods for hull work, pipe work and pumping systems, machinery, propellers and other items to satisfy maintenance of class position
- safe practices for working with lifting gear
- safe working practices in enclosed or confined spaces
- shipboard vibration
- statutory survey requirements
- terminology relating to the structure, capacities and operations of various types of tankers and gas carriers
- types of ships and key features of ships
- vessel stability
- watertight integrity
- WHS/OHS legislation and policies.

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

Assessment must satisfy the National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) standards.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations or where these are not available, in simulated workplace operational situations or an industry-approved marine operations site that replicates workplace conditions where advanced knowledge of ship operation and maintenance can be demonstrated.

Resources for assessment include access to:

- relevant documentation including workplace procedures, regulations, codes of practice and operation manuals
- technical reference library with current publications on commercial shipping
- tools, equipment, materials and personal protective equipment currently used in industry.

Performance should be demonstrated consistently over time and in a suitable range of contexts.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>