



**Scottish Qualifications Authority (trading as SQA)**

**SQA Level 2 Diploma in Maritime Studies: Marine Vessel Maintenance (QCF) 60028142**

<b>Type of qualification</b>	QCF (Qualifications and Credit Framework)
<b>Credits</b>	67
<b>Guided Learning Hours</b>	Minimum of 485 to Maximum of 639 Guided Learning Hours
<b>Overview of the Qualification</b>	<p>The purpose of this qualification is to provide you with the practical skills and knowledge to enable you to safely and efficiently maintain and repair the equipment fitted to Merchant Vessels.</p> <p>This vocational qualification is one component of an approved Merchant Navy training programme and is the first step toward confirming occupational competence and achieving certification as an Electro-technical or Engineering Officer within the Merchant Navy.</p> <p>Achieving this qualification is part of the process of confirming occupational competence for these roles and you will be required to undertake other components of the Merchant Navy programme to become certified as an Officer. These include e.g:</p> <ul style="list-style-type: none"><li>• SQA Level 3 Diploma in Shipping and Maritime Operations (you would normally undertake this qualification at the same time as the Level 2 Diploma in Maritime Studies: Marine Vessel Maintenance)</li><li>• HNC/D Nautical Science or Marine Engineering (you will progress to an appropriate HNC/D qualification following successful completion of the above qualifications)</li></ul> <p>The Level 2 Diploma in Maritime Studies: Marine Vessel Maintenance qualification has two routes:</p> <ul style="list-style-type: none"><li>• <b>Electro-technical Officer</b> route - (Electro-technical officers are responsible for monitoring all electronic and electrical equipment on-board to maximise the operational safety and efficiency of the vessel)</li><li>• <b>Engineering Officer</b> route. (Engineering officers operate and maintain all the mechanical and electrical equipment throughout the ship).</li></ul> <p>The pathway you choose will be formally recognised on your certificate.</p> <p>You will receive advice and guidance about which job disciplines best suit your ambition and current skills to ensure you enrol onto the correct route. To be awarded the qualification, you must complete all of the mandatory units within your chosen route.</p>

**Electro-technical route – 8 mandatory units:**

- Marine Vessel Electrical Installation
- Maintaining Electrical Equipment/Systems
- Marine Electrical Lighting and Control Systems
- Marine Vessel Electronic Systems Design and Test
- Marine Vessel Electronic Systems Assembly
- Marine Vessel Electronic Navigational Equipment and Maintenance
- Marine Vessel Communication Systems
- Marine Vessel High Voltage Awareness

This route will provide you with the skills and knowledge to:

- monitor electrical and electronic equipment onboard the ship, including radio communications and electronic navigation aids
- ensure specific electrical/electronic equipment is maintained to the correct standards
- carry out checks and ensure the safe and efficient operation of electrical and electronic equipment, including high voltage (>1000V) equipment
- problem solve e.g. diagnose electrical and electronic faults and take action to prevent the problem from happening again

**Engineering route – 9 mandatory units:**

- Producing components using hand fitting techniques
- Preparing and Using Lathes for Turning Operations
- Maintaining Electrical Equipment/Systems
- Working Safely in an Engineering Environment
- Carrying Out Engineering Activities Efficiently and Effectively
- Using and Communicating Technical Information
- General Fabrication and Welding Applications
- Forming and Assembling Pipework Systems
- Marine Vessel Plant Maintenance

This route will provide you with the skills and knowledge to:

- Operate and maintain machinery and support systems on a ship, including planning and preparation of engineering maintenance jobs
- Work safely in an engineering environment and comply with relevant regulations, guidelines and procedures
- problem solve over a wide range of machinery and equipment
- communicate clearly with staff at all levels
- work effectively within a team

**Who is the qualification for?**

This qualification may be of interest to you if you are

- wishing to enter the Merchant Navy
- a Rating already working within the shipping industry (who will not have this extensive range of skills), or
- wishing to transfer from another career
- practically minded and enjoy learning in a structured and detailed manner using practical training, and enjoy the challenge that a career in technology and as a Ship's Officer entails.

**Age range**

You would be an adult aged over 16, to enable you to undertake the industrial placement (sea service) that would be required after successfully achieving this qualification. NB - for the industrial placement you would need to meet the seafarer medical requirements for the UK.

**Entry requirements**

GCSE Grades A-C or Scottish Standard grades at Levels 1-3 in the following subjects: English Language, Maths, a Science based subject and at least one other subject. Or a National Certificate/Diploma: in appropriate subjects (such as Engineering or Science)

**Apprenticeships/ Other qualifications**

There is no suitable Apprenticeship route available for these job roles and no other qualification at this level that meets industry requirements for progression to these job roles.

If you wish to pursue a career as an Engineering Officer then you will be interested in the other components of the Merchant Navy training programme that will help lead you to becoming certified as an Officer:

- SQA Level 3 Diploma in Shipping and Maritime Operations - this qualification will provide you with the underpinning knowledge of the maritime sector and prepare you for further learning within the Merchant Navy training programme (i.e. it will provide a progression route to HNC/D in Marine Engineering or Nautical Science)

**What can the qualification lead to?**

This qualification provides part of the approved training programme for Merchant Navy Officers and can enable progression to a job as a junior Officer within the Merchant Navy (following completion of the appropriate HNC/D qualification this qualification progresses onto).

<http://www.mntb.org.uk/en-GB/Training-Frameworks>

On completion of the full approved training programme for Merchant Navy Officers the rank that you can hold without further training is Electro-technical Officer (Electro-technical route) or Fourth and Third Engineering Officer (engineering route). With further professional development and assessment you can progress to a Chief Electro-technical Officer or Second/Chief Engineering Officer roles.

Following successful completion of the full training scheme (of which this qualification is a mandatory element) you will hold both a Certificate of Competency (issued by the UK Maritime and Coastguard Agency) as well as a Higher Education qualification that provides you with the skills and knowledge to undertake a role as a junior Ship's Officer.

**Any other relevant information**

The qualification is designed by employers to meet their specific needs, and ensures that successful learners are "job ready".

The qualification was developed in conjunction with the Merchant Navy Training Board, and the UK maritime regulator (Maritime and Coastguard Agency) to ensure it is 'fit for purpose' to meet the needs of employers and to meet international regulatory requirements.

The qualification is recognised and supported by the Merchant Navy Training Board, the Maritime Skills Alliance and employers working within the maritime sector.

The qualification and training scheme it forms part of provides a structured learning platform, a fixed progression route to initial and senior certification, formal work experiences, and a qualification that is recognised and valued across the world

Links to employers "Careers at Sea" website showing both the opportunities that exist for a career at sea, as well as the progression into a career in the maritime sector ashore:

<http://www.careersatsea.org/roles>

<http://www.careersatsea.org/roles/ashore.php>

A seafarer medical fitness certificate is required to work at sea.

<https://www.gov.uk/seafarer-medical-certificates/overview>

**SQA website**

[www.sqa.org.uk](http://www.sqa.org.uk)

**Telephone**

0345 279 1000

**E-mail enquiries**

[customer@sqa.org.uk](mailto:customer@sqa.org.uk)