Merchant Navy Engineer Officer

Introduction

Merchant Navy engineer officers oversee the smooth running and maintenance of a ship’s main propulsion machinery. They work in the engine rooms of a variety of ships such as cruise liners, ferries or cargo ships.

Also known as

- Engineering Officer, Merchant Navy
- Navy Engineering Officer, Merchant Navy

Work Activities

Engineer officers are responsible for all aspects of the running and maintenance of the ship’s engines and other machinery, such as:

- generators
- pumps
- sewage treatment plant
- purifiers
- mechanical cargo handling equipment.

Most of this equipment is electronically controlled or automated to varying degrees. However, the engine rooms need continuous watchkeeping, so officers work on a shift system. This usually means four hours on watch and eight off, or six on and six off.

Officers control and monitor the performance of plant and machinery, carry out planned maintenance, diagnose and rectify faults, and maintain safety equipment.

Specific duties vary according to the type of vessel. Large passenger ships have 'hotel services engineers' who look after air conditioning systems and passenger lifts.

On cargo ships, engineers control refrigerators which are essential for the transportation of fruit and meat. On scientific survey ships, engineers are responsible for hydraulic machinery that is used to lower and raise equipment from the sea bed.

Most engineer officers supervise the work of a crew of engineer ratings, and make sure they work effectively together.

Engineer officers sometimes work in difficult and uncomfortable conditions and they spend up to four months at a time away from family and friends. They usually stay in their own cabin, with an en-suite bathroom. Recreation facilities vary according to the ship.

Royal Fleet Auxiliary Engineer Officers

Merchant Navy engineer officers can also work on Royal Fleet Auxiliary (RFA) ships. These ships supply cargo to Royal Navy (RN) ships at sea. As RFA personnel work closely with the Royal Navy, they may have to perform duties under combat conditions.

Personal Qualities and Skills

To do this job well, you’ll need:

- To be able to show initiative and self-reliance.
• Good problem-solving skills.
• To be a confident person so that your instructions are respected and followed.
• An interest in physics.
• Good teamworking skills, as you’ll often be working with large groups of people.

It's very useful to have an interest in boats, ships and the sea. You should also have some knowledge of the types of machinery found on boats and ships, and how that machinery works.

Pay and Opportunities

Pay

Salary rates for Merchant Navy officers vary with the company.
The pay rates given below are approximate.

Engineer officers earn in the range of:
Starting: £20,000 - £25,000
With experience: £30,000 - £40,000
High flyers: Around £65,000.

Hours of work

Shift work is usual. Ships operate 24 hours a day, seven days a week, 365 days a year.

Demand

Demand for engineer officers is steady.

Where could I work?

Merchant Navy personnel are civilian employees who work on a variety of ships of all sizes including:
• passenger and cruise liners
• container ships
• oil tankers
• cargo vessels
• passenger and freight ferries.

The Royal Fleet Auxiliary, which supplies the needs of Royal Navy ships at sea, also employs civilian Merchant Navy personnel.

Merchant Navy engineering officers work on board ships on local, national and international voyages.

Where are vacancies advertised?

Vacancies are advertised on all the major job boards, on Universal Jobmatch, and at Jobcentre Plus.

Vacancies are advertised on shipping lines' websites.

Entry Routes and Training

Entry routes

The main route into careers in the Merchant Navy is by applying directly to sponsoring companies. The Merchant
Navy Training Board has a complete list of these companies.

Once sponsored, there are various routes to full qualification. These include:

- A Foundation Degree in Marine Engineering.
- Degrees in Mechanical and Power Plant Systems, Mechanical and Marine Engineering, or Marine Engineering.
- An HNC/HND in Marine Engineering.

People with seafaring experience or relevant qualifications may be exempt from some of the academic and practical aspects of training. This makes your route to full qualification quicker. Sponsoring companies will provide relevant details.

**Training**

Training varies according to employers. Generally, it covers subjects such as mechanics, engineering drawing, fitting, machining and welding. All trainees are also given thorough instruction in health and safety, including firefighting and survival techniques.

**Progression**

After your training period, the promotion routes for engineer officers are as follows:

- junior/fourth engineer to third engineer
- third engineer to second engineer
- second engineer to chief engineer.

For each of the ranks mentioned above, you will have to hold a Certificate of Competency which is issued by the Maritime and Coastguard Agency.

**Rehabilitation of Offenders Act**

This career is an exception to the Rehabilitation of Offenders Act 1974. This means that you must supply information to an employer about any spent or unspent convictions, cautions, reprimands or warnings, if they ask you to. This is different from other careers, where you only have to reveal information on unspent convictions if you are asked to.

**Qualifications**

For entry to a relevant degree course the usual minimum requirement is:

- 2/3 A levels, including Maths and Physics.
- GCSEs at grade C or above in your A level subjects.
- A further 2/3 GCSEs at grade C or above, including English.

Alternatives to A levels include:

- BTEC level 3 qualifications.
- Advanced Level Apprenticeships.
- The International Baccalaureate Diploma (IBD).

However, entry requirements for different courses vary, so check university prospectuses for more details.

To enter a relevant HNC/HND or foundation degree, you’ll usually need:
• 1 A level. Science subjects, such as physics will be useful.
• A GCSE at grade C or above in your A level subject.
• A further 3/4 GCSEs at grade C or above, including English and Maths.

Alternatives to A levels include:

• BTEC level 3 qualifications.
• Advanced Level Apprenticeships.
• The International Baccalaureate Diploma (IBD).

However, entry requirements for different courses vary, so check university prospectuses for more details.

Some universities accept the Welsh Baccalaureate as equivalent to 1 A-level.

**Adult Opportunities**

**Age limits**

It is illegal for any organisation to set age limits for entry to employment, education or training, unless they can show there is a real need to have these limits.

**Courses**

The University of Plymouth and City College, Plymouth, offer foundation degrees in Marine Engineering by part-time study. These courses take three years to complete.

The Marine Society College of the Sea offers seafarers a route to top up their HND or foundation degree to a full honours degree. Candidates can go on to achieve an MA or MSc. This is delivered via the work-based learning and Professional Studies programme, by distance learning.

**Funding**

Candidates can apply for financial support for study from The Marine Society.

**Statistics**

• 18% of Merchant Navy engineer officers are self-employed.
• 11% work part-time.

**Further Information**

Contact individual shipping companies or training providers.

**Contacts**

• **The Engineer**
  Engineering technology news
  Website: [www.theengineer.co.uk](http://www.theengineer.co.uk)

• **Tomorrow's Engineers**
  Publisher: EngineeringUK and Royal Academy of Engineering
  Email: contactus@tomorrowsengineers.org.uk
  Website: [www.tomorrowsengineers.org.uk](http://www.tomorrowsengineers.org.uk)

• **Engineer Jobs**
  Publisher: Venture Marketing Group
  Website: [www.engineerjobs.co.uk](http://www.engineerjobs.co.uk)
• **Getting into Engineering Courses**  
  Author: James Burnett  
  Publisher: Trotman

• **Scottish Engineering**  
  Scottish enquiries  
  Address: 105 West George Street, Glasgow G2 1QL  
  Tel: 0141 2213181  
  Email: consult@scottishengineering.org.uk  
  Website: [www.scottishengineering.org.uk](http://www.scottishengineering.org.uk)

• **Maritime and Coastguard Agency (MCA)**  
  Address: Spring Place, 105 Commercial Road, Southampton, Hampshire SO15 1EG  
  Tel: 02380 329100  
  Website: [www.dft.gov.uk/mca/](http://www.dft.gov.uk/mca/)

• **Careers at Sea**  
  Merchant Navy  
  Address: 12 Carthusian Street, London EC1M 6EZ  
  Email: enquiry@careersatsea.org  
  Website: [www.careersatsea.org](http://www.careersatsea.org)

• **Royal Fleet Auxiliary**  
  Tel: 0845 6040520  
  Website: [www.royalnavy.mod.uk/careers/royal-fleet-auxiliary](http://www.royalnavy.mod.uk/careers/royal-fleet-auxiliary)

• **Ship Safe Training Group Ltd (SSTG)**  
  Address: The Precinct Office, The Precinct, Rochester, Kent ME1 1SR  
  Tel: 01634 820820  
  Email: training@sstg.org  
  Website: [www.sstg.org](http://www.sstg.org)

• **Marine Society & Sea Cadets (MSSC)**  
  Address: 202 Lambeth Road, London SE1 7JW  
  Tel: 020 7654 7000  
  Email: info@ms-sc.org  
  Website: [www.ms-sc.org](http://www.ms-sc.org)

• **Trinity House Merchant Navy Scholarship Scheme**  
  Address: Unit G Deacons Marina, Bursledon Bridge, Southampton SO31 8AW  
  Tel: 023 8040 4607  
  Email: enquiries@trinityhousetraining.org  
  Website: [www.trinityhousetraining.org](http://www.trinityhousetraining.org)

• **Merchant Navy Training Board (MNTB)**  
  Address: 30 Park Street, London SE1 9EQ  
  Website: [www.mntb.org.uk](http://www.mntb.org.uk)

• **Sea Vision UK**  
  Email: enquiries@seavision.org.uk  
  Website: [www.seavision.org.uk](http://www.seavision.org.uk)

• **Clyde Marine Training**  
  Scottish enquiries  
  Address: Kintyre House, 209 Govan Road, Glasgow G51 1HJ  
  Tel: 0141 4276655  
  Email: training@clydemarine.com  
  Website: [www.clydemarinetraining.com](http://www.clydemarinetraining.com)

• **Institute of Marine Engineering, Science and Technology (IMarEST)**  
  Address: Aldgate House, 33 Aldgate High Street, London EC3N 1EN  
  Tel: 020 7382 2600
• **Marine Scientist**  
Publisher: Institute of Marine Engineering, Science and Technology (IMarEST)  
Website: [www.imarest.org/Publications/MarineScientist.aspx](http://www.imarest.org/Publications/MarineScientist.aspx)

• **Careers Wales - Welsh Apprenticeships**  
Tel: 0800 028 4844  
Website: [ams.careerswales.com/](http://ams.careerswales.com/)

• **Sea Cadets**  
Whether at sea or on land, the Sea Cadets offers young people across the UK amazing opportunities for personal development - by learning new skills and working in teams - the Sea Cadets offer an environment where young people find new confidence and inspiration.  
Website: [www.sea-cadets.org/](http://www.sea-cadets.org/)

**Related Careers**

• Merchant Navy Rating  
• Merchant Navy Deck Officer  
• Merchant Navy Electro-Technical Officer