

The Work

As a Merchant Navy engineering officer, you would operate and maintain the machinery and support systems on a ship, both above and below deck. You would work with the engines, ventilation systems, navigation and communications equipment, and deck fittings such as cranes, hoists and landing craft.

Your job would be graded according to your experience and qualifications, with each grade having slightly different responsibilities:

- Chief Engineer - overall authority for planning engineering tasks and allocating staff
- Second Engineer - supervising the day-to-day duties of staff and engine crew
- Third Engineer - assisting the second officer and looking after electrical systems and machinery
- Fourth Engineer - carrying out general machinery maintenance. This is often the first posting for an officer trainee.

Whatever your engineering grade, your duties would include:

- running scheduled maintenance checks on machinery and systems
- responding to equipment failure alerts and repairing faults
- maintaining fuel levels and stocks of spare parts
- updating record management systems
- mentoring and supporting trainees.

In the Merchant Navy, you could work on passenger ferries, cruise liners, container ships, bulk carriers, tankers, and salvage and supply vessels. In the Royal Fleet Auxiliary (civilian-crewed ships that support the Royal Navy), you could have responsibility for weapons maintenance.

Entry Requirements

You could take one of the following training routes to become a merchant navy engineering officer. Your starting point would depend on your current level of qualifications:

- HND route
- Foundation Degree route
- Undergraduate route
- Graduate route

Whatever route you take, you must be at least 18 years old to start training. You would also have to arrange sponsorship from a shipping company, who would provide you with work experience placements at sea. You would be expected to pass a medical, including an eyesight test, before being accepted on to a training course.

HND route

You would complete a 3 year training programme that leads to a HND. To be eligible, you would need at least four GCSEs including maths, science and English, or equivalent qualifications.

Foundation Degree route

On this training programme you would work towards a foundation degree. Entry requirements are GCSE English, Maths, Physics/Combined Science and one other subject, plus 2 A levels.

Undergraduate Route

To take this route, you would need to study for an approved degree in either marine engineering, nautical studies or marine operations. See the UCAS website for details of colleges and universities offering relevant degrees, and their exact entry requirements.

- Universities and Colleges Admissions Service (UCAS)

Graduate Route

To be eligible for this route, you would need a science-based degree. As a graduate entrant, you could expect an accelerated training programme.

See the websites for the Merchant Navy Training Board (MNTB), Marine Society, A Career at Sea and the International Shipping Federation (ISF) for details of sponsoring shipping companies, course entry requirements and training colleges.

Hours

You would work shifts, known as 'watches', which would vary according to the size of the ship. On a large vessel, you might work four hours on duty followed by eight hours off.

The amount of time you would spend at sea could last from a few days or weeks to several months. Your shore leave between voyages would also vary in length. You would spend most of your shift in the engine control room and the engine room. You may also have to work in uncomfortable conditions, like confined spaces in the vessel's hull or refrigerated areas.

If you are with the Royal Fleet Auxiliary, you may be required to work in conflict zones.

Skills and Knowledge

- practical skills in mechanical, electrical and electronic engineering
- excellent maths, science, technology and IT skills
- the ability to communicate clearly with staff at all levels
- the ability to prioritise workloads and plan effectively
- the confidence to make decisions
- good teamworking skills
- a willingness to work away from home, often for lengthy periods.

Training and Development

Your training as an officer cadet would combine shore-based college work and practical seafaring experience.

Training can take three to four years, depending on which course you choose, and would cover engineering skills, such as:

- hydraulics
- instrumentation and control
- electrical systems
- diesel propulsion and turbines
- onboard health and safety like first aid, fire-fighting and personal sea survival.

If you follow the HND route, you would also complete the NVQ in Marine Vessel Operations up to Level 3.

At the end of your training, you would have to pass an exam for a Certificate of Competency (known as an Officer Of the Watch (OOW) certificate). This is issued by the Coastguard and Maritime Agency. When you want to apply for promotion to the next engineering grade, you must gain the OOW certificate for that rank.

During your time at sea, you would have the opportunity to develop your career. A number of organisations offer courses for professional development, many by distance learning, including the option to top up an HND or foundation degree to a full degree. For details, see the Marine Society & Sea Cadets website.

- Marine Society & Sea Cadets

More Information

Marine Society & Sea Cadets
202 Lambeth Road
London
SE1 7JW
Tel: 020 7654 7000
www.ms-sc.org

Merchant Navy Training Board
Carthusian Court
12 Carthusian St
London
EC1M 6EZ
Tel: 0800 085 0973
www.mntb.org.uk

A Career at Sea
www.careersatsea.org

International Shipping Federation (ISF)
www.marisec.org/careers

Opportunities

You could find work with UK and overseas shipping companies. You could also use your technical and managerial skills to move to shore-based jobs in areas such as shipping and port operations, maritime law and insurance, shipbroking or other engineering industries.

Your options for promotion to higher grades would be based on your length of service, your work record and having the relevant OOW certificates.

You may find the following useful for job vacancies and general reading: (links open in new window)

[A Career at Sea \(list of shipping companies\)](#)
[Royal Fleet Auxiliary](#)

We do not accept responsibility for the content of external sites.

Income

- Sponsored trainee salaries are usually around £8,000 a year.
- Newly qualified engineering officers earn around £25,000 a year.
- Experienced officers earn from £26,000 to £50,000.
- Chief engineering officers can earn between £32,000 and £65,000.

The employer will pay for food and accommodation at sea, and some travel costs when ashore.

Figures are intended as a guideline only.

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