

Resource Pack

2016

In association with:



MARINE ENGINEERS ARE RESPONSIBLE FOR DESIGNING, TESTING, BUILDING AND REPAIRING VESSELS SUCH AS SHIPS AND BOATS, AS WELL AS OFFSHORE PLATFORMS, RIGS AND PIPELINES.

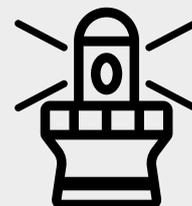
In short, marine engineers keep those at **sea afloat**.

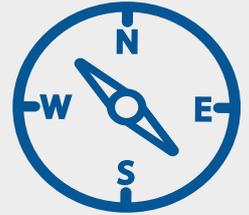
If it's offshore, it probably relies on a marine engineer. As such, there are lots of opportunities for engineers in the **leisure, oil** and **gas industry**, shipping and merchant and defence navies.

As global trade increases and green energy drives an increase in offshore projects, the demand for marine engineers is constantly increasing.

Many roles give you a chance to **travel the world**; work is often shift-based, taking you overseas for days or weeks at a time. This career brings you face to face with the elements, so you'll need strong sea legs!

Marine engineers are problem solvers and natural team players. Working alongside technicians, architects, designers and managers, they play a key role in keeping vessels, platforms and systems running smoothly.





TYPES OF MARINE ENGINEERING WORK

Marine engineering is a wide and varied career path, with a diverse range of roles and sectors available to anyone with an interest in ships and all things offshore.

Here are just a few of the different types of work a marine engineer could explore:

ENGINEERING OFFICER

Merchant and defence navies require engineering officers, to manage the team and ensure that technology is efficient, safe and compliant with the relevant laws.

ENGINEERING TECHNICIAN

Engineering technicians support marine engineer officers with day-to-day operations, to make sure the systems are in good working order and that any issues are fixed fast.

OFFSHORE ENERGY

In the oil and gas industry, marine engineers help to install, maintain and run platforms and rigs, to ensure they operate safely and efficiently.



MARINE SURVEYING

A marine surveyor assesses the condition and safety of vessels and offshore installations, to flag up any causes of concern. They can also act as consultants.



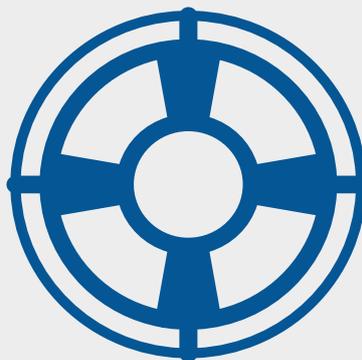
SHIPBUILDING

Not all marine engineers work offshore. In the shipbuilding industry, marine engineers are needed on the ground to design, test and build the next generation of vessels.



SHIPYARDS AND MARINAS

When ships come into port, they often require maintenance and repair work. This is a hands-on role for a marine engineer, to ensure vessels are ready for their next journey.





ROUTES INTO MARINE ENGINEERING



Marine engineers have a unique mix of practical and technical skills, which makes a good grounding in science and maths essential. For design-orientated roles, strong IT skills are often critical too.



A-LEVELS

If you're considering a maritime career, it's a good idea to take physics and maths at A-Level. Courses such as Product Design and IT may also be relevant to give you a head start for both apprenticeships and university.



APPRENTICESHIPS

In recent years, the number of apprenticeships in this sector has skyrocketed, as employers offer an alternative route into marine engineering for those who don't want to go to university.

By taking an apprenticeship in a marine engineering, you could gain valuable experience and qualifications, learning on the job as you earn.

For a Level 3 Apprenticeship, you'll need four to five GCSEs, usually in English, Maths and at least one Science subject. However, the entry requirements for a Level 2 scheme are much lower for school leavers.

There are various ways to dive into the action – one popular route is through [the Royal Navy](#).

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Their Marine Engineer Technician Apprenticeship has two stages; the Level 2 Apprenticeship in Engineering Maintenance and Installation, followed by the Level 3 Apprenticeship in Engineering Maintenance.

Both give you the opportunity to travel the world, earning up to £16,681 a year as you learn how to design, build and maintain the systems that underpin the Royal Navy.

For more information about Royal Navy Careers, visit

www.royalnavy.mod.uk/careers





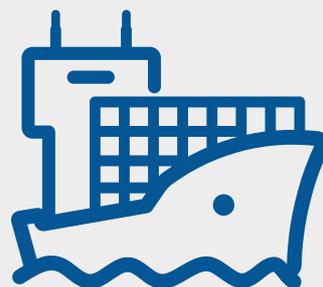
UNIVERSITY

The traditional route into marine engineering is formal education, by taking an undergraduate degree in Marine Engineering, Marine Technology, or another relevant engineering or maritime course.

Alternatively, it's possible to take a Masters in marine engineering after a science or engineering-based undergraduate degree.

After graduating, you'll still need to undergo training – often in a graduate apprenticeship scheme – to gain the necessary skills and knowledge to become an Incorporated or Chartered Marine Engineer.

Once you have gained enough experience, you can apply to the Institute of Marine Engineering, Science and Technology (IMarEST) to join their register as a qualified professional.



More useful resources

Need more help with your careers choices? You can find a wealth of help and opportunities at the following places :



ROYAL NAVY



THEBIGCHOICE.COM

Find quality advice and opportunities in apprenticeships, part-time jobs and training on this youth careers portal.



SCHOOL LEAVERS GUIDE

This interactive app guide brings together expert advice, guidance on career steps and positions from top employers via your tablet or smartphone.



NATIONAL CAREERS SERVICE

The official place for careers advice and information in the UK.



NATIONAL APPRENTICESHIP SERVICE

Everything you need on apprenticeships and the best vacancies on offer.