

# Careers in the maritime sector



# We are a maritime nation. Start your journey.

The UK is proud to have one of the most vibrant and competitive maritime sectors in the world – and our competitiveness is not solely down to efficient tax regimes and a stable business climate. Quite simply, the UK is the world's maritime centre because of its workforce.

With sea trade expected to double in the next 20 years, the need for a highly skilled workforce has never been greater. The UK is committed to providing world-class seafarers, port workers, engineers, naval architects, shipbrokers, financiers, accountants, consultants, insurers and lawyers, so that – together – they can meet the long-term needs of this most global of sectors.

The international maritime community recognises the UK's unequalled expertise, thought leadership, and world-leading innovation – and we never stop looking for the brightest and best people to join our industry.

The career opportunities are as broad as they are exciting. Start your journey.

# Apprenticeships

Apprenticeships are particularly suited to the maritime sector because so many jobs require the mix of practical learning and theoretical study which is at the heart of the apprenticeship model. From managing a busy port to catering on a cruise ship, from navigating the open sea to lifting a customer's yacht ashore to clean it, from building a fast ferry to driving it, the maritime sector offers a wide and growing range of apprenticeships as the starting-point for some very rewarding careers.

Apprenticeships are jobs which mixing practical learning on-the-job alongside a more experienced colleague, and more theoretical study. They're designed to give apprentices a strong foundation for their career, and the fact that so many senior people in the industry started their careers as apprentices is powerful evidence of just how successful apprenticeships are.

It's no wonder that governments throughout the UK are keen to encourage businesses to offer more apprenticeships, providing subsidies to all sizes of business, with particularly generous packages for smaller firms.

For individuals, apprenticeships have the major attraction that apprentices get a wage while they are learning.

Apprenticeships are currently available for crew in the shipping sector (particularly ferries and cruise ships), with roles both on deck and in the engine room, for crew on the Thames and other inland waterways (leading to the Boatmaster licence), and for workboat operatives (mostly supporting the construction sector).

There is a specialist boatbuilding apprenticeship covering both building and repair for all types and sizes of boats and yachts. And there are many related apprenticeships in the engineering field.

Ports offer apprenticeships for port operatives and a wide range of engineering and other roles.

In marinas and boatyards there are apprenticeships for the people who move and maintain, and clean customers' boats and yachts.

And of course there's a huge range of apprenticeships in the Royal Navy, and in the Royal Fleet Auxiliary (the civilian fleet which supplies Royal Navy vessels at sea).

The list is growing all the time, with new apprenticeships being prepared for marine pilots and port management roles, for coastguard operations crew, for commercial roles in ports as agents for shipping companies, and for ships' catering crew and superyacht crew.

#### The Maritime Skills Alliance

has further information of apprenticeships in inland waterways, marines and bootyards, marine pilotage

the Merchant Navy, port operations (stevedoring), the Royal Navy, sea fishing and workboats.

maritimeskills.org

2 - Careers in the maritime sector Careers in the maritime sector

## **Business Services**

Shipowners need effective shipbrokers, lawyers, bankers and insurers. These business services – many with a global reach – are a vital part of the maritime industry, and a vast number of service companies are based in London and across the UK.

Britain is unmatched for its expertise in shipbroking, insurance, and legal and financial services. More vessels are fixed through UK-based shipbrokers, more capital provided via London banks and funds, and more vessels insured here than in any other location in the world. English law is also applied to more shipping contracts than the law of any other country, and London has the highest concentration of solicitors, barristers and arbitrators specialising in maritime issues and dispute resolution.

This range of activities means the UK is often seen as a 'one stop shop' for marine matters.

Many people enter these sectors after a career at sea, but many more choose to enter shipping having established themselves in professional services. It means graduates in law, economics, finance and many other disciplines – many of whom have never thought about a maritime career – find themselves becoming a crucial part of the industry.

Business services companies are committed to their workforce, and there is a strong culture of continuing professional development, underpinned by world-renowned integrity.



# Engineering

Engineering is all about solving problems using specialist technical and practical skills. It's all about maths, science, research, prototypes, design, maintenance and production.

Every industry and every area of society depend on the precise and efficient work of engineers. Engineers provide technological solutions to the problems, issues and ideas that affect every area of our lives.

There are roles for engineers in the maritime sector on shore and at sea.

Marine engineers are involved in the design, construction, installation, operation, maintenance and repair of the main propulsion engines and auxiliary machinery and systems found in all kinds of ships, boats and offshore installations.

Marine engineers work on engines and auxiliary equipment in the boatbuilding and shipbuilding industries and associated companies. A number of engineering disciplines – such as mechanical, electronic and structural – are involved. Marine engineers need to understand the effects of wind, waves and corrosion. Ships, boats, underwater structures, and the systems within them must be capable of operating in demanding conditions.

Marine engineers employed by merchant shipping companies work on engines and different kinds of vessels, from cruise ships to tankers. They are responsible for the operation and maintenance of the engines, as well as the electrical and electronic equipment. Engineering ratings undertake routine maintenance and repair work in the engine room, check instrument readings and operate controls.

Careers at Sea, provided by the Merchant Navy Training Board, has an array of materia on engineer careers in the Merchant Navy.

careersatsea.org

IMarEST (The Institute of Marine Engineering, Science and Technology) has information introducing you to some of the careers in marine science, engineering and technology.

imarest.org



Maritime London represents
the UK's professional maritim
business services industry.
maritimelondon.com

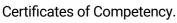
Institute of Chartered
Shipbrokers has information
on careers in shipbroking.
ics.org.uk

4 - Careers in the maritime sector Careers in the maritime sector - 5

# Sea Fishing & Aquaculture

Seafood is a multi-billion pound industry in the UK. Four out of five households consume seafood at least once a month and total purchases of seafood in the UK were worth £5.84 billion in 2010.

The breadth and level of occupations in sea fishing vary depending upon the size of the vessel, type of catch and area in which the vessel operate. To go to sea on a commercial sea fishing vessel, individuals must undergo statutory safety training in basic sea survival, fire fighting and first aid. In addition, skippers, mates and engineers working on fishing vessels above a certain length and engine power, or operating in certain sea areas, are required to hold statutory Maritime and Coastguard Agency (MCA)





Diverse career opportunities are available in the leisure, small commercial and superyacht industry. Over 4600 companies with a combined worth of over £3 billion have a variety of career opportunities that could suit you. From boat building to marina manager to marine surveyor, yacht broker to watersports instructor to skipper and everything in between. The industry is also at the forefront of innovation, pioneering new technology, world-renowned craftsmanship and a world leader in design.



AND THE PARTY OF T The Sea Fish Industry **Authority** (Seafish) supports

seafish.org

British Marine represents the UK's britishmarine.co.uk

The Royal Yachting Association

rya.org.uk

## Marine Science

Seventy per cent of the Earth's surface is covered by oceans and seas. We are reliant on our oceans and seas for many things, although most importantly for food, exploitable energy sources (such as wind power, oil and gas) and tourism revenue. It is easy to see, therefore, how our health and the health of our planet depends in no small part on the condition of our oceans and seas.

The world's oceans contain some of the richest areas of biodiversity. Our seas are already showing the effects of climate change and we must ensure that marine ecosystems are sufficiently healthy to be resilient in the face of changing conditions.

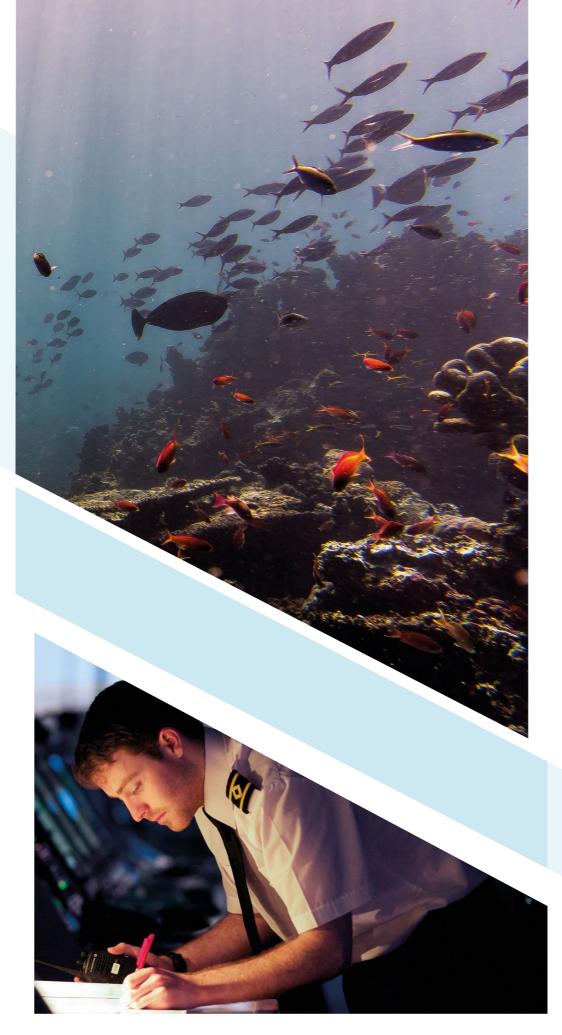
The UK has one of the world's richest marine environments. As an island nation we are responsible for a sea area over three times larger than our land area. We have about 20,000 km of coastline (roughly equivalent to half way round the world). Over 8,000 animal and plant species have been recorded in our seas and the number continues to grow as scientists discover more life in our oceans.

Marine scientists are involved in research, analysis and forecasts in relation to the oceans, their life forms and coastal areas. They analyse the sea and its interaction with the land, atmosphere and sea floors and use the information gained to predict changes to the earth's infrastructure, inform statutory legislation and encourage environmental protection.

Marine scientists are employed by universities, international organisations, commercial companies, government agencies, not-for-profit organisations and marine research institutes.

The National Oceanography
Centre is the United Kingdom's
centre of excellence for
oceanographic sciences.
noc.ac.uk

IMarEST (The Institute of Marine Engineering, Science and Technology) has information introducing you to some of the careers in marine science, engineering and technology.



# **Merchant Navy**

A career at sea offers a wealth of exciting opportunities for anyone looking for adventure and a job away from the normal humdrum of a desk job.

The Merchant Navy is the collective term for commercial shipping and includes a variety of vessels from cruise ships to tankers and cargo ships of all description.

This fast moving and technologically advanced industry requires highly trained seafarers working across navigation, engineering, electrotechnical and on-board services disciplines at both officer and rating levels. There are a variety of entry routes available to start a career at sea within the Merchant Navy, which includes fully sponsored training programmes and apprenticeships.

With world- class institutions and a robust training system, UK seafarers are sought after all across the world and the range of skills they acquire during their training enables them to thrive in a competitive industry.

Those who decide to pursue a career at sea by following the officer training route will, on completion, be in a management position ensuring that the vessel and its crew are safe, all the machinery is maintained and the cargo reaches its destination on time and intact. Ratings are the 'support staff' working on vessels and directed by the officers to ensure the running of the ship is a safe and efficient operation. There are also roles for those interested in on-board services and hospitality, on vessel such as cruise ships and passenger ferries.

Careers at Sea, provided by the Merchant Navy Training Board, has an array of material on careers in the Merchant Navy.

## **Naval Architecture**

Naval architects are primarily involved in the design of vessels which move just above, on or under the sea. These include tankers, container ships, passenger ferries, warships, drilling platforms, submarines, hovercraft, yachts and other small vessels – such as landing craft, diving support vessels and unmanned submersibles. Naval architects work on the safe, economic and seaworthy design of small boats and yachts as well as on ships and submarines. They can specialise in construction/conversion, managing the whole process from the design board to the finished vessel. Their work includes planning the construction process, the supply of materials, fitting-out and testing. There are also specialised technical problems to be solved in areas such as cargo handling.

Certain organisations, such as classification societies, fleet owners and flag states, employ naval architects as ship surveyors. A ship is monitored during its design, construction and throughout its life to ensure that it is safe and seaworthy and meets other statutory rules and regulations. Naval architects, marine engineers and nautical surveyors often work together carrying out tests, surveys and procedures. Naval architects may also work in research. There are also opportunities in rig fabrication and siting for the oil and gas industries. Those operating at Chartered and Incorporated Engineer level in naval architecture usually have the most responsible jobs.

They are involved with bringing in new technological innovations and advanced design and production methods and ensuring that existing technology works as efficiently as possible. Engineers usually also have managerial responsibility. Engineering Technicians typically lead small, specialist teams in the detailed, 'hands-on' engineering work.

The Royal Institution of Naval
Architects (RINA), is an renowned
institution involved at all levels
in the design, construction,
maintenance and operation of
marine vessels and structures.

British Marine represents the UK's leisure marine industry and has careers information, including on naval architecture and boat design.

britishmarine.co.uk



## Ports & Harbours

Every year, 65 million passengers, and 500 million tonnes of cargo – 95 per cent of the UK's total imports and exports – move through UK ports. Quite simply, British ports keep the economy moving.

As an island nation, the UK requires everything from deep-water container ports to small harbours. Ports support the needs of oil and gas tankers, ro-ro, liquid and dry bulk, ferry and cruise companies, and every kind of commercial, military and leisure use of the sea imaginable.

This variety of port facilities provides opportunities for every possible port-based career. Ports form an essential part of the UK logistics chain, which means – as well as marine disciplines – there are opportunities for maritime professionals in port operations, engineering, warehousing, transport, planning, safety, security, and a host of other business areas. In recent years, new national occupational standards, apprenticeships and qualifications have been developed to support the wide range of sophisticated, modern services offered by UK ports. Many of these schemes recognise and incorporate marine qualifications and experience.

Many countries and international companies look to tap into the experience of the UK's strong port sector, while major ports elsewhere in the world – especially in emerging markets – use British expertise.

The British Ports Association

Ports Skills and Safety has

portskillsandsafety.co.uk

has information on jobs available with its members.
britishports.org.uk

The UK Major Ports Group
members have careers
information available.
ukmajorports.org.uk

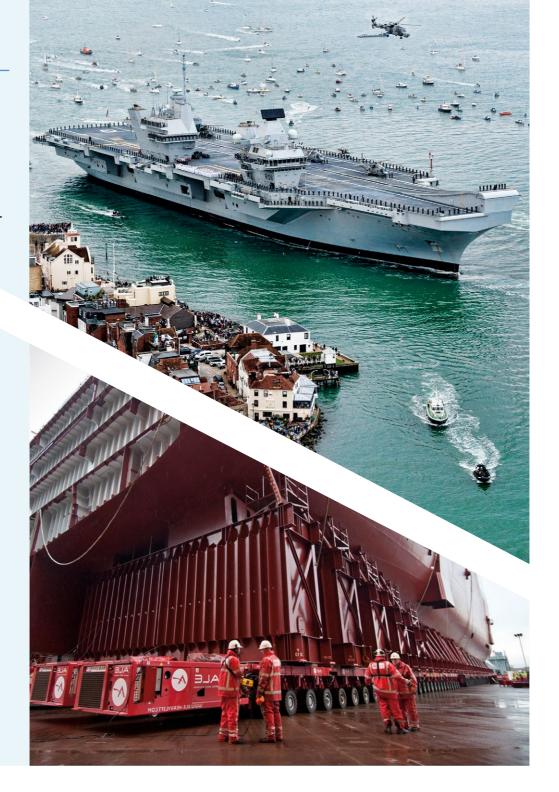
# Royal Navy

The Naval Service is a team of over 30,000 men and women from all walks of life, who work together to defend, protect and secure and our nation's interests. You could be safeguarding the high seas, delivering humanitarian aid when natural or man-made disasters strike or protecting UK forces in foreign waters.

No matter what you do in the Naval Service, you'll play a key part in vital operations all around the world. From maintaining cutting-edge equipment to piloting helicopters or providing hospitality there's a place for everyone.

A future in the Naval Service provides a rewarding career filled with adventure, possibilities - and job security.

Britain's history is intimately tied with that of the Royal Navy and while the organisation is going through an exciting period of change, there's never been a better time to join. The introduction of the new Queen Elizabeth class aircraft carriers, Type 45 Destroyers and Astute class submarines send a clear message about the role that the United Kingdom plays in global security.



Joining the Royal Navy

royalnavy.mod.uk

# Shipbuilding & Boatbuilding

Shipbuilding is the business of building large ocean-going vessels usually of steel. Boatbuilding is the term used for the construction of smaller vessels from materials such as wood, steel, aluminium, glass fibre or new composite materials. There are opportunities in ship and boatbuilding at every level.

The worldwide shipbuilding industry has changed in recent years dominance has moved from the West to the Far East – particularly South Korea and China. In the UK, there are currently a small number of shipyards engaged in building large ships. These may build specialist vessels such as the RSS David Attenborough, or, often, ships for the Royal Navy (the UK is a leader in warship production – an example being the HMS Daring, the first of a new generation of destroyers which, it is claimed, can defend the city of London from aircraft and missile attack single-handedly!). There are also a number of smaller shipyards building smaller vessels such as tugs, ferries, fishing and survey/research vessels.

Boatbuilders construct boats typically up to about 50 metres in length – both boats for leisure (from luxury power boats to sailing dinghies) and small commercial craft. There are also manufacturers of marine equipment such as sails, engines, electronics and boat fittings. Most modern boats are made in a factory environment, but there are also some boatbuilders that build traditional wooden craft. Boatbuilding for the leisure industry is thriving.

**IMarEST** (The Institute of Marine

imarest.org

British Marine represents the

britishmarine.co.uk

# Superyachts

A superyacht is, by definition, any yacht over 24 metres (79 feet) in length - that's about the length of a tennis court. There are many hundreds of superyachts sailing the seas and oceans today - they can be motor or sail, and they employ thousands of crew members from around the world. The largest superyacht in the world at the moment is 164 metres (538 feet) in length – that's larger than a Royal Navy Destroyer! However, the average length of superyachts today is around 45 metres (148 feet).

Owning or chartering one of these multi-million-pound superyachts is the domain of the rich and famous, but behind the glamorous, glossy façade, there is a whole team of workers keeping everything ship-shape. The number of superyachts being built is increasing each year, and there is now a shortage of skilled workers to crew them. Working on a superyacht is certainly not a holiday, but the rewards can be generous and it's a great way to see the world in style.



## Workboats & Tugs

The workboat sector covers a wide variety of vessel types from tugs and harbour launches to larger multicats and the fast crew transfer vessels often seen going in and out of many of our ports today. These vessels usually work with small crews of 2-6 persons, who cover a wide variety of duties as they work with a range of contractors on port construction and infrastructure projects or supporting the offshore energy industries, constructing and operating offshore wind farms. The work tends to be quite varied allowing crew to quickly gain a wide range of experiences.

The vessel Master will be supported by multipurpose workboat crew members who may have gained experience in other marine sectors or have come straight into the industry through a Workboat apprenticeship. Large crew will have a 'Mate' or Officer of the Watch assisting the Master with watchkeeping duties. UK operated Workboats are currently working all over Europe and in many other parts of the world e.g. The Middle East, South America, the Caribbean and West Africa, so this is an excellent way to make a career at sea and travel to many parts of the world. A workboat apprenticeship is currently available as when as further training leading to Restricted Masters Certificates of competency in a relatively guick timescale. The workboat sector continues to grow and expand into new areas giving further opportunities to crew members.

The National Workboat **Association** is the trade workboatassociation.org

The BTA represents the interests of port towage operators from large britishtug.com

Superyacht UK represents the

The **UKSA** offers several routes

uksa.org

superyachtuk.com

# Inland waterways

The UK's Inland Waterways includes lakes, lochs, canals, non-tidal rivers, tidal rivers and estuaries - essentially any marine area or waterway not classified as being 'at sea'.

A significant amount of commercial trade and activity takes place on the country's Inland Waterways - passenger and freight movements, and other services - principally in and around the UK's major ports and larger estuarial rivers.

Some 8% of all freight moved within the UK in 2014 was moved on the Inland Waterways. The tidal Thames is the busiest Inland Waterway in the country by far. In 2016 the Thames supported 10.6 million passenger trips and moved more than 3 million tonnes of freight,



#### The Thames Skills Academy

thamesacademy.london

#### The Association of Inland Navigation Authorities (AINA)

aina.org.uk

#### The Inland Waterways Association (IWA) is a

works to protect and restore waterways.org.uk

For more information about careers in the maritime sector visit maritimeuk.org/careers For centuries the UK has been the home of all forms of maritime business. The secret to the UK's longevity as a maritime centre is not just its expertise and experience, but its refusal to rest on its laurels.

We are a maritime nation. Start your journey.



30 Park Street London SE1 9EQ

020 7417 2837



maritimeuk.org/careers