

Maritime Careers

Faculty of Nautical Studies



CONTENTS

Maritime Industry	04
Roles & Duties On Board A Ship	06
Point to Consider (Advantages & Disadvantages of a Merchant Navy Career)	08
Is This Career For Me?.....	10
Academic Routes & Entry Requirements.....	12
Other Entry Requirements.....	14
Career Prospects.....	16
Application Process.....	18
Contacts	19

Why Choose City of Glasgow College?

- Delivering high quality nautical training since 1969
- One of Scotland's biggest colleges, home to almost 30,000 students and 1,200 staff
- 360 Deck and Engine cadets enrolled each year from UK and international companies
- Modern, world-class campuses in the centre of Glasgow delivering training to over 3,500 marine students
- Excellent learning facilities including bridge and engine room simulators, ECDIS and GMDSS labs
- Continual investment in college infrastructure: over £230m invested in our Riverside and City campuses
- Dedicated teaching staff with extensive industry experience
- Relationships with local SMEs, international blue chip companies and awarding bodies
- Excellent international reputation, with both college staff and students winning many national and international competitions
- Flexibility of course delivery to meet client needs

MARITIME INDUSTRY

The Maritime Industry includes all organisations/institutions engaged in the business of designing, constructing, manufacturing, acquiring, operating, supplying, repairing and/or maintaining ships. It also includes businesses which are operating shipping lines, providing brokerage services and those managing/operating shipyards, dry docks, marine railways, shipping and freight forwarding services and other similar businesses. The figure 1 shows the full list of possible maritime career fields as advised by 'Maritime UK' which aims to promote the UK as a leading maritime nation.

The Merchant Navy is the collective name for the UK's commercial shipping industry. It is composed of individual shipping companies who are responsible for their own recruitment and training.

Officers in the Merchant Navy play a central role in one of Britain's leading industries. As an Island nation, over 95% of all our imports and exports are by sea, helping make the Maritime sector the third largest revenue generator in the UK. Scotland has played an important role in maritime history and the maritime sector is still important to the Scottish economy. About 52% of jobs in sea fishing in Scotland are in the Highlands and Islands.

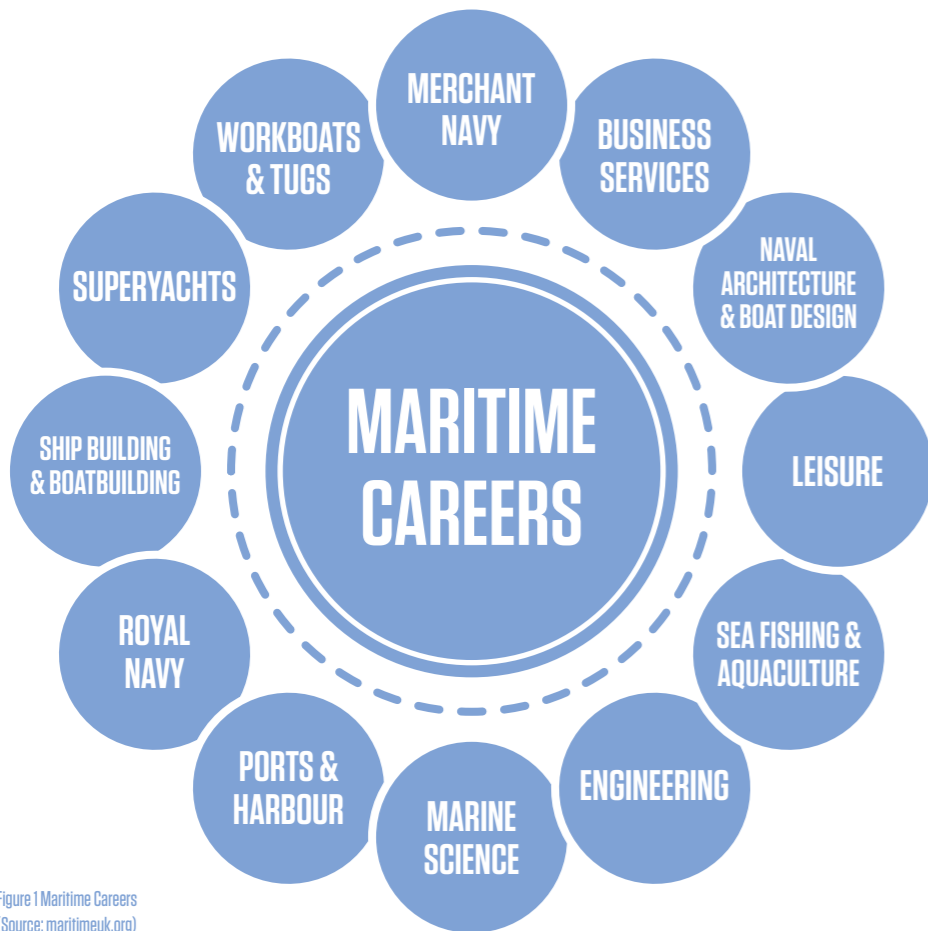


Figure 1 Maritime Careers
(Source: maritimeuk.org)



The sea trade in UK is expected to double in the next 20 years and there is a demand for a highly skilled workforce (both officer and rating levels) across navigation, engineering, electro-technical disciplines. There are a variety of entry routes available to start a Merchant Navy career: 'still at school' National 5 maritime training, access course for those not meeting entry requirements for higher course programme, NC course for those with higher grades and wishing to get an introduction to the Merchant Navy, ratings programme or fully sponsored training programmes. City of Glasgow College, Nautical Faculty is proud to offer both sponsored and non-sponsored course programmes for Merchant Navy Training. Hence, if you couldn't secure sponsorship with a shipping company or agency you can still pursue this career through an alternative route.

The Maritime industry is exciting and diverse offering a variety of job opportunities either at sea or shore-based. The following brochure provides a general overview about maritime career opportunities and specifically in the Merchant Navy field and includes the educational pathways available. This will be of particular interest to individuals who are interested in a career at sea or on-shore, or those interested to get insight into the Merchant Navy & maritime careers.

ROLES & DUTIES ON BOARD A SHIP

There are a number of departments on every ship with the most important to be Navigation (Deck) and Engineering. Both departments have a certain order of hierarchy with each crew member having a specific rank with assigned duties. Hence, it is important to make a decision of which department you prefer before you start your career.

Engineering Department

You will be responsible for the safe running of the ships engine, cooling systems, control systems and all mechanical systems on board.

Chief Engineer

The Chief Engineer of the ship is the head of the Engineering department of the ship. They are responsible for safety of crew working in the engine room and to ensure that the engine room machinery works properly for a safe voyage.

Second Engineer

The role of the Second Engineer is to assist the Chief Engineer in the safe and efficient management of the Engine Department, which involves looking after the entire operation of the engine room and other technical aspects of the ship.

Third Engineer

The Third Engineer will perform engine watch keeping duty as well as monitor and maintain equipment as directed by Second Engineer. They are usually responsible for the change of boilers, fuel, auxiliary engines, condensate and feed systems.

Electrical Training Officer (ETO)

The Electrician on board a merchant vessel is the crew member working on the electrical equipment and systems, wiring and high voltage panels. ETO looks after all the highly advanced electronic and electrical equipment on board the ship. You would be responsible for maintenance and monitoring of all electrical equipment on board (i.e. engine rooms, communication devices, navigation aids like echo sounders, weather fax, radar system, etc.). Electrical training officer is also responsible for assisting chief officer in handling routine works especially related to electrical handling and also coordinate work with on shore technicians.

Fourth Engineer

The Fourth Engineer is the most junior engineering officer, who has duties assigned by the Second Engineer, and typically responsible for: engine watch, air compressors, purifiers and other auxiliary machinery.

Cadet / Engine Ratings

A Cadet on board a merchant vessel receives structured training and experience on board and learns how to become an engine or electrical officer. Apart from the officers, the engineering department crew consists of ratings, such as Motorman, Fitter, Electrician, Pumpman and Oiler/wiper.

Deck Department Navigation

You will be responsible for the safety of crew, passengers and cargo. Once you have berthed the ship in port you would oversee the cargo operations, while maintaining the safety and security of the ship. You would be central to the navigation of the vessels at sea, by using the latest technology and computer based systems.

Captain

The Captain (Master) holds the highest position on the vessel and has command of the ship and the crew. They are responsible for the maintenance of the vessel and the safety of the crew on board. They have overall responsibility for the ship, her cargo, passengers and all crew, and responsible for the ship to comply with any custom and immigration regulations. To reach the Master's rank, a seafarer must first have several years of experience as a deck officer and as a Chief Officer.

Chief Officer

Chief Officer (Chief Mate) is the next in rank after Master. They are in charge of vessel navigation, cargo operations, deck machinery and maintenance of deck equipment and safety of the vessel. The Chief Officer also manages other officers on deck, and assigns duties according to the Captain's orders.

Second Officer

Second Officer is the next in rank after the Chief Mate and is the ship's navigator. Their main duty is to prepare the passage plan and upkeep the chart folio and navigational publications. The Second Officer may also be designated to train the cadets on board or to fulfil the rank of a security, safety, environmental or medical officer.

Third Officer

The Third Officer is usually the Ship's Safety Officer undertaking watch keeping duties and also ensuring the functionality of lifesaving appliances.

Cadet / Boatswain / Deck Ratings

A Cadet on board a merchant vessel receives structured training and experience on board and learns how to become a deck officer. Apart from the officers, the deck department crew also consists of ratings, such as AB (Able Body Seaman), OS (Ordinary Seaman) and Boatswain.

POINTS TO CONSIDER: ADVANTAGES AND DISADVANTAGES OF A MERCHANT NAVY CAREER

Merchant Navy is a demanding occupation that, like many careers, has advantages and disadvantages and you must be sure that it is right for you.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Travel the world • Meet new people from different cultures • Internationally recognised qualification (global employment market) • A good proportion of female officers are working in the Merchant Navy at all rank levels • Highly skilled profession with continuous Training and development opportunities • Huge career prospects both offshore and shore (huge demand for many ranks) • Good salary (may also be exempt from tax) • Long leave (for 2 months voyage you can get 2 months leave) 	<ul style="list-style-type: none"> • You might have to go for long voyages away from home and family (up to 4 – 6 months) • Weather conditions



Apprenticeship / Scholarship

During training the sponsoring company may pay the cadet an allowance of between £8,500 and £15,000 a year which will include accommodation while attending college.

Earnings

Average starting salaries, when qualified, are £20,000 to £27,000 a year for a Third Officer and Fourth Engineer, rising to £34,000 to £42,000 for a second officer and third engineer. Chief officers and Second Engineers can earn up to around £55,000 a year and masters (captains) and Chief Engineers can earn up to £75,000 or more a year.

While at sea, your food and accommodation is provided by the company as well as your travel costs which will be paid by the shipping company. On foreign-going ships, your earnings may be tax free.

IS THIS CAREER FOR ME?

A career at sea is a tough career but it also offers many advantages and opportunities. However it also requires certain characteristics and personal attributes:

- An interest in Science and Technology
- Good Maths, IT and Computer skills
- A creative approach to solving problems
- Willingness to obey orders when required
- Strong sense of responsibility
- Good written and verbal communication skills
- Integrity and initiative
- Ability to work on your own and also as part of a team
- Ability to interact with others (different cultures)
- Ability to work long hours
- Ability to work to deadlines
- Ability to handle complex information
- Ability to work under pressure
- Attention to detail
- Ability to plan and organise work
- Good leadership and management skills
- Ability to react quickly to emergencies and remain calm under pressure



On any day you could be:

- Using satellite and radar equipment to navigate and steer the ship
- Controlling communication systems
- Ensuring the stability of the ship in port and at sea
- Checking and controlling speed and fuel consumption
- Overseeing the loading and unloading of cargo
- Supervising maintenance work and the mooring of the ship
- Checking that deck gear, safety and fire-fighting equipment are all in good order
- Keeping records, correcting navigational charts and ordering supplies.
- Maintaining main propulsion engines
- Maintaining all ships system such as electrical power generation, refrigeration and air conditioning systems



ACADEMIC ROUTES AND ENTRY REQUIREMENTS

School Learners	School Leavers / Graduates				
Maritime Skills for Work (National 5) For Secondary 3 Above (Part-Time) National 5 Skills for Work: Maritime Skills is an introductory qualification which provides a broad experiential introduction to maritime skills. It develops the skills, knowledge and attitudes needed for work in the industry. Suitable for: <ul style="list-style-type: none"> • Pupils from schools or other education Establishments • School leavers • Learners participating in 16+ programmes • Adult returners to education • Individuals involved in voluntary activities 	Access to NC Shipping and Maritime Operations (Full-Time) 1 Year (SCQF Level 6) This course is an access course to the NC Shipping and Maritime Operations course. It will introduce you to a range of topics and provide a background in to how the industry is regulated and the functions ashore and at sea.	NC Shipping and Maritime Operations (Full-Time) 1 Year (SCQF Level 6) This course is for anyone looking to start their career in the Maritime Industry. It will introduce you to a range of topics and provide a background into how the industry is regulated and the functions ashore and at sea.	Ratings (Deck / Engineering) DECK An Able Seaman or Efficient Deckhand work as an unlicensed member of the deck department. Deck ratings are responsible for cleaning, sweeping, chipping of rust, polishing, etc. They help in loading and unloading of cargo and in port they assist in the mooring of the ship as well as taking a watch at sea. They are also members of the emergency team, lifesaving, damage control, and safety equipment. ENGINEERING Engine Ratings are responsible for day to day cleaning, repair and routine maintenance of the engine room.	Higher National Certificate (HNC) 3 Years The attainment level of the qualification is roughly equivalent to one year of University and a Certificate of Higher Education but being less than that of a Higher National Diploma (HND).	Higher National Diploma / Scottish Professional Diploma (SPD) 3 Years This course is for students with higher lever entry qualifications. It is the Scottish equivalent to the Foundation Degree. The course consists of two elements: The HND Nautical Science/Marine Engineering which is delivered during the first and second college phases and covers all the units for the SQA Group Award at SCQF Level 8. PDA in Marine Management is a management award at SCQF level 9, which gives cadets the opportunity to develop their analytical and critical thinking skills. These combined give the student the SPD award.
Suitable for: <ul style="list-style-type: none"> • Learners in employment who wish to enhance their career prospects • College students wishing to develop their skills and knowledge in relation to Maritime Skills • Trainees participating in preparation for entering employment 					

12 Maritime Careers

Entry Requirements	Entry Requirements				
Maritime Skills for Work (National 5) For Secondary 3 Above (Part-Time) N/A	Access to NC Shipping and Maritime Operations (Full-Time) 1 Year (SCQF Level 6) Three National 4 passes or equivalent including Maths, Physics, or Technological Studies, or equivalent.	NC Shipping and Maritime Operations (Full-Time) 1 Year (SCQF Level 6) Three National 5 passes or equivalent including Maths, Physics, or Technological Studies, or equivalent.	Ratings (Deck / Engineering) DECK The basic level is Efficient Deck Hand (EDH) which can lead on to an Able Seaman certificate. Currently the only entry route to EDH is to be sponsored by a shipping company as it requires candidates to complete sea-time onboard a sea going merchant ship. ENGINEERING The basic level is Motorman, which can lead to a Fitter or GP1. Currently the only entry route to Motorman is to be sponsored by a shipping company as it requires candidates to complete sea-time onboard a sea going merchant ship in order to gain an Engine Room Watch Rating Certificate.	Higher National Certificate (HNC) 3 Years To gain entry to the course, you should have National 5/ GCSE or equivalent which must include: <ul style="list-style-type: none"> • English • Maths • Physical Science (e.g. Physics/Chemistry/ Technological Studies Engineering Science) • One other subject 	Higher National Diploma / Scottish Professional Diploma (SPD) 3 Years To gain entry to the course, you should have Higher Maths and/or Physical Science at grade C or above, and National 5/GCSE or equivalent which must include: <ul style="list-style-type: none"> • English • Maths • Physical Science (e.g. Physics/Chemistry/ Technological Studies Engineering Science) • One other subject

13 Maritime Careers

OTHER ENTRY REQUIREMENTS

If you are interested in a career as a seafarer on a ship and would like to pursue a cadetship (i.e. HNC/SPD), a number of requirements have to be met before you can start your career:

- **Minimum age**

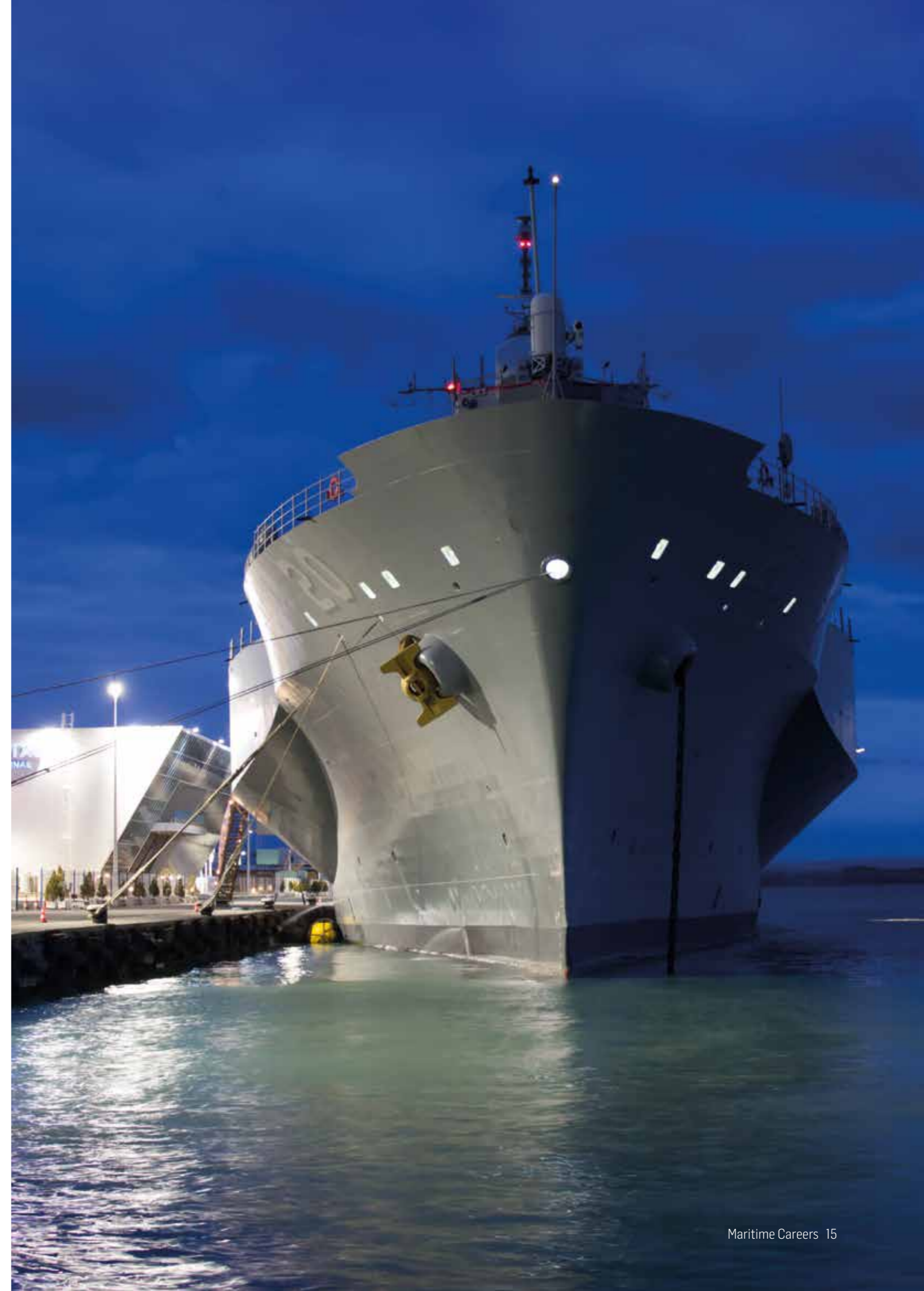
You must be at least 16 years of age to undertake these programmes (i.e. HNC/SPD)

- **UK residency and EU Nationality**

You must hold a valid UK/EU passport. International applicants are welcome and we request that you please get in touch with the college for more information

- **Medical requirements**

Before training, you are required to pass the MCA Seafarer Medical Examinations (ENG1). This requires you to meet the internationally required standards. A list of approved doctors are found at www.gov.uk/government/publications/mca-approved-doctors-uk-based. This medical examination is designed to highlight medical conditions that would be difficult to treat, or could become worse whilst at sea



CAREER PROSPECTS

The successful completion of HNC/HND/SPD course in Nautical Science or Marine Engineering along with written and oral exams required by Maritime and Coastguard Agency (MCA) will result in MCA Certificate of Competency as an Officer of the Watch (OOW) or Engineering Officer of the Watch (EOOW).

The Merchant Navy provides clear training routes to enable progression from the Junior level OOW to more Senior levels. After finishing their cadetship course and obtaining OOW/EOOW ticket many will look further to reach the ranks of Chief Mate/Captain, Chief engineer or Chief Electro-Engineer on board ship. As a qualified deck or engineering officer, and with further training and experience, you can gain the qualifications required to become the master (captain) or chief engineer. It generally takes an additional six years to achieve these qualifications.

Alternative career paths include further education at University or shore based jobs.

Further Education

- **Maritime Engineering**

At present successful students obtaining an HND Marine Engineering can articulate to third year of university to study a range of Engineering degrees

- **Maritime Operations**

At present successful students obtaining an HND Nautical Science can articulate to the final year of the BSc (Hons) Navigation and Maritime Science



Employment

Merchant Navy officers' qualification provides career opportunities throughout the entire UK Merchant Navy fleet and also overseas.

Career development will often depend on the employing shipping company and the kinds of vessels it operates.

The fast growing maritime sector provides a range of career paths, with opportunities at sea and onshore.

Sea-based Careers (Offshore)	Land-based Careers (Onshore)
<ul style="list-style-type: none"> • Marine Engineering • Deck Management • Catering / Hospitality services 	<ul style="list-style-type: none"> • Training providers • Shipping management and registration services • Port management • Ship brokering • Maritime law • Craft inspectors • Marine engineering • Marine environmental protection • Maritime admiration (accounting, business development, human resources, IT) • Naval architecture • Oceanography • Map making (cartography and hydrography) • Surveying

This is just a short list of some of the jobs available to you once you qualify.

Currently expected employment in the industry is rising with a push nationally for people to become more involved in the Merchant Navy.

APPLICATION PROCESS

For applications for **Maritime Skills for Work (National 5)** please get in touch with us: maritime@cityofglasgowcollege.ac.uk.

Applications for Access course and NC Shipping and Maritime Operations are accepted through online application on the website:
<https://www.cityofglasgowcollege.ac.uk/courses/>

For HNC and SPD course, if you have the qualifications and meet entry requirements you will need to gain sponsorship from a shipping company before starting the course. The way to do this is by applying to them directly:

- BP Maritime Services (Singapore) Pte Ltd
- V.Ships
- Pritchard-Gordon Tankers Ltd
- Carnival UK
- James Fisher and Sons Crewing Services Ltd
- Maersk Crewing Ltd
- Royal Fleet Auxiliary
- Shell Ship Management Ltd
- Princess Cruises
- Pacific Nuclear Transport Ltd (PNTL)

You can apply directly to these groups – who set up tuition and training for the Shipping Industry:

- Anglo Eastern UK Ltd
- Chiltern Maritime Ltd
- Clyde Marine Training Ltd
- Ship Safe Training Group
- Viking Recruitment Ltd

CONTACTS

General Enquiries

Email: maritime@cityofglasgowcollege.ac.uk
Phone: 0141 375 5605

Client Liaison Officers

Steven Turner

Email: Steven.Turner@cityofglasgowcollege.ac.uk
Phone: 0141 375 5287

Liza Bellet

Email: Jelizaveta.Bellet@cityofglasgowcollege.ac.uk
Phone: 0141 375 5296





City of Glasgow College – Riverside Campus

Address

21 Thistle Street
Glasgow
G5 9XB

Email: maritime@cityofglasgowcollege.ac.uk
Phone: 0141 566 6222

Online

-  www.facebook.com/cogcnautical
-  www.twitter.com/cogcnautical
-  www.youtube.com/user/CofGCollege
-  www.linkedin.com/company/city-of-glasgow-college

