

**MERCHANT NAVY
ENGINEERING
CADETSHIP**

A hand is pointing at a large digital screen that displays a 3D simulation of an engine room. The simulation shows various pipes, valves, and machinery. The screen has a blue tint. In the top right corner of the screen, the text "Engine Room VR-view" is visible. At the bottom of the screen, there are several buttons labeled "Process Overview", "Panel Directory", and "Process Directory".

**FULLY
SPONSORED
TRAINING
TO PREPARE
YOU FOR A
CAREER AT
SEA.**



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THANK YOU FOR YOUR INTEREST IN **HUMBER MARITIME COLLEGE.**

We are based on the River Humber in North East Lincolnshire and are part of the TEC Partnership, a dynamic, collaborative and entrepreneurial group of further and higher education colleges.

Our aim is to be recognised as a leading maritime college which brings new ideas and innovation to the training of Merchant Navy Cadets and others working in the maritime industries.

Cadets will study across two centres, giving them access to a wide range of education, welfare and social facilities. The specialist marine lectures will take place at Humber Maritime College and you will also have access to the learning centre and facilities at the Ofsted Outstanding Grimsby Institute, a short distance from Humber Maritime College and near our halls of residence.

Your cadetship is fully sponsored by employers which means you gain your university-level qualification without the worry of fees. You will also earn while you are learning, which is a great opportunity for those aiming to become a marine Engineering Officer.

This guide outlines the route to becoming a marine Engineering Officer, as well as the benefits and support cadets will receive while training at Humber Maritime College.

If you have any questions, please do not hesitate to contact us.

I look forward to welcoming you to the Humber Maritime College.

HUGH CALLAWAY

Managing Director

THE INDUSTRY

The Merchant Navy is the international commercial shipping industry, transporting both cargo and people to destinations worldwide.

Shipping is a vital part of our economy with over 90% of goods coming in and out of the UK by sea. The Merchant Navy is a non-military service and is made up of a large number of shipping companies which use a variety of vessels such as cargo ships, tankers, cruise liners, passenger vessels, offshore and support vessels.

The Merchant Navy offers a wide range of opportunities that lead to a unique and exciting career. Working in this industry is a great experience and one of few where you get paid to travel the world.

Working at sea can be adventurous and challenging. It is not your usual nine-to-five career and is both competitive and fast-moving, so to work in the industry cadets must be skilled and motivated.

There are many opportunities for qualified engineers to work onshore within the maritime industry.



ABOUT US

We have a history in delivering maritime education and training through our former nautical college and are well positioned to offer our cadets a comprehensive training programme.

With our record of providing outstanding training and provision, you can be assured that you will receive the knowledge and experience you need to be ready for a career in the Merchant Navy.

Our applied learning approach will use classroom, simulator and blended learning activities to immerse cadets in fostering and developing the skills they need to become successful officers in the Merchant Navy.

As part of the TEC Partnership, we have access to a wide range of resources at the Grimsby Institute, an Ofsted Outstanding college and TEF Silver-accredited University Centre Grimsby. Cadets, who in their first year will stay within our halls of residence, will have access to superb sports facilities, a 24-hour learning resource centre, a range of social and welfare facilities and, as we are specialising in marine engineering, our cadets will use extensive engineering and refrigeration workshops.

A GUIDE TO JOINING THE MERCHANT NAVY AS AN ENGINEERING OFFICER



A marine Engineering Officer is responsible for the safety, performance and maintenance of the engine room and ship's technical systems.

To work in this role, individuals must be practical and resourceful and have a real interest in the industry and mechanical and electrical systems. To be successful and to progress in the industry, individuals will continue to learn new skills and, as technology develops, new systems and machinery.

This role requires specific skills and qualities such as good Maths, English and technical skills, motivation, initiative, decision making and the ability to work both as part of a team and independently. Due to the nature of this career, individuals must also be willing to work away from home for long periods of time.

CAREERS AT SEA

A career at sea is an exciting and different lifestyle to lead. Working in this industry can open up a wide range of opportunities and pathways to progress in a truly global industry. Individuals will be working in a well-paid and challenging career which is constantly developing.



ENGINEERING OFFICER

Engineering Officers are specialists in the operation of maritime vessels, making sure the technical equipment such as pumps, engines and propulsion systems on the ship are safe and working properly while at sea.

Officers will spend the majority of their time at sea working in the ship's engine room. At Humber Maritime College, we have an engine room simulator which cadets will use throughout their time with us. This will allow cadets to get a feel for the working environment and to practise a wide variety of scenarios, in preparation for a career at sea. During the programme, cadets will continue to use our bespoke simulators to develop skills and improve specific learning areas applicable to each individual.

At Humber Maritime College, we offer the marine Engineering Officer HNC/HND programme, which normally takes cadets two-and-a-half to three years to complete depending on which route is taken. This programme is made up of a number of phases, split between training at sea with a shipping company and onshore at Humber Maritime College. Cadets will begin with a foundation phase, which is followed by the Higher National Certificate (HNC), and then have the option to top-up to the Higher National Diploma (HND). Cadets will also undertake the mandatory STCW courses and study a Level 2 course in workshop skills..



OUR CADET PROGRAMME

OUR CADET PROGRAMME

PHASE 1: FOUNDATION PHASE

Location: Humber Maritime College

Duration: 26 weeks

- College induction
- Development of individual learning programme
- Cadetship and company induction

• **Standards of Training, Certification and Watchkeeping for Seafarers (STCW) basic training week to include enclosed space training**

• **SQA Level 2 Diploma in Maritime Studies: Marine Vessel Maintenance (Engineering) (workshop skills)**

• **SQA Level 3 Diploma in Maritime Studies/Shipping and Maritime Operations**

- Shipboard induction, including simulator use and blended learning requirements
- Training record book introduction and legal introduction
- Tutorial and personal development, behaviour and welfare programme
- First sea phase introduction.

STCW basic training and Merchant Navy Training Board enclosed space training

- Personal survival techniques
- Fire prevention and firefighting
- Elementary first aid
- Personal safety and social responsibility
- Proficiency in designated security duties
- Legal and professional
- Merchant Navy Training Board – confined spaces.

SQA Level 2 Diploma in Maritime Studies: Marine Vessel Maintenance (Engineering) (workshop skills)

- Producing components using hand-fitting techniques
- Preparing and using lathes for turning operations
- General fabrication and welding applications
- Forming and assembling pipework systems
- Working safely in an engineering environment
- Carrying out engineering activities efficiently and effectively
- Using and communicating technical information.

SQA Level 3 Diploma in Maritime Studies/ Shipping and Maritime Operations

- Maritime employment, environmental and health and safety practice
- Maritime sector overview
- Vessel construction and stability
- Mathematics for seafarers
- Marine engineering dynamics
- Marine heat engines
- Strength of materials for marine engineers
- Control vessel operations
- Numeracy for seafarers
- Basic vessel engineering systems
- Statics for marine engineers
- Electrical principles for marine engineers.

Programme timetable subject to change inline with MNTB guidelines.



OUR CADET PROGRAMME

PHASE 2: FIRST SEA PHASE

Location: At sea and on leave

Duration: 26 weeks

- On-board inductions and familiarisation; practical tasks as per training record book
- Distance learning for shipboard operations unit.

PHASE 3: TRAINING AND DEVELOPMENT

Location: Humber Maritime College

Duration: 26 weeks

- **Commencement of SQA HNC Level 4 Marine Engineering**

- **SQA Level 2 Diploma in Maritime Studies: Maritime Vessel Maintenance (Engineering) (Workshop Skills)**

- Second sea phase introduction.

PHASE 4: SECOND SEA PHASE

Location: At sea and on leave

Duration: 38 weeks

- Practical tasks as per training record book with an emphasis on watchkeeping
- HND project and support via distance learning.

Commencement of SQA HNC Level 4 Marine Engineering

- Marine engineering graded unit
- Marine engineering thermodynamics
- Marine engineering mechanical principles
- Marine engineering electro-technology
- Marine engineering stability and structure
- Marine engineering pneumatics and hydraulic systems
- Marine engineering auxiliary systems
- Marine engineering propulsion
- Fundamentals of controls and transducers
- Engineering mathematics
- Marine legislation and leadership
- Safety engineering and the environment
- Marine engineering heat engine principles.

SQA Level 2 Diploma in Maritime Studies: Maritime Vessel Maintenance (Engineering) (workshop skills)

- Producing components using hand-fitting techniques
- Preparing and using lathes for turning operations
- Maintaining electrical equipment/systems
- General fabrication and welding applications
- Forming and assembling pipework systems
- Marine vessel plant maintenance
- Marine engineering heat engine principles.





OUR CADET PROGRAMME

PHASE 5: CONTINUATION OF ACADEMIC PROGRAMME, ADDITIONAL SHORT COURSE, EXAM AND ORAL PREPARATION

Location: Humber Maritime College

Duration: 14 weeks for Higher National Certificates (HNC)
or 36 weeks for Higher National Diploma (HND).

HNC ROUTE

- **Advanced STCW training**
- **Complete SQA Level 2 Diploma**

- Examination preparation
- Oral preparation
- Examinations and orals.

STCW Advanced Training

- Proficiency in survival crafts and rescue boats
- Advanced fire fighting
- Medical first aid
- High voltage operational
- Human Element Leadership and Management (HELM) course at the operational level.

SQA Level 2 Diploma in Maritime Studies: Marine Vessel Maintenance (Engineering) (workshop skills)

- Producing components using hand-fitting techniques
- Preparing and using lathes for turning operations
- Maintaining electrical equipment/systems
- General fabrication and welding applications
- Forming and assembling pipework systems
- Marine vessel plant maintenance.

HND ROUTE

- **Advanced STCW Training**
- **Complete SQA Level 2 Diploma**
- **Complete SQA Level 5 HND**

- Marine engineering
- Examination preparation
- Oral preparation
- Examinations and orals.

SQA HND Level 5 Marine Engineering

- Engineering maths unit 2
- Project management for IT
- Marine engineering graded unit 2
- Marine engineering management
- Marine engineering strength of materials
- Marine engineering applied mechanics
- Marine engineering applied thermodynamics
- Marine engineering naval architecture
- Marine engineering ship construction and survey
- Marine engineering electrical power
- Marine engineering electrical distribution
- Marine engineering process control
- Marine engineering mechanics
- Marine engineering electrical machines.

A photograph of three young men, likely naval cadets, in a control room. They are looking at a large screen displaying a radar or map. The man on the left is wearing a white short-sleeved shirt and a dark tie. The man in the middle is wearing a dark blue sweater over a white shirt and a striped tie. The man on the right is wearing a blue long-sleeved shirt and a striped tie, and has glasses. The background is dark with some equipment visible.

SEA TIME REQUIREMENTS

All cadets are required to gain 12 months' combined seagoing service and workshop skills training.

This must include a minimum of six months' seagoing service engaged in watchkeeping or unmanned machinery space (UMS) duties and three months' workshop skills training.

Seagoing service must be completed on merchant ships of at least 750kW and include on-board training that meets the requirements of section A-III/1 of the STCW Code. This training must be documented in an approved Merchant Navy Training Board training record book (TRB) and its associated workbook.



ASSESSMENT **METHODS**

There will be a range of assessment methods used throughout the cadetship, including orals, practical projects, written assessments and simulator exercises.

All cadets will undertake the International Association of Maritime Institutions exams in their final college phase and also sit Maritime & Coast Guard Agency Orals for the award of their Certificate of Competency, which qualifies the cadet as an Engineering Officer of the Watch.

ENTRY REQUIREMENTS

QUALIFICATIONS

Applicants must be 17+ and hold four GCSEs at grade 9 to 4 (or A* to C) / Scottish equivalent in Maths, English and a science-based subject. If you have other equivalent qualifications and prior learning and/or experience in the marine industry, please contact us.

MEDICAL

Cadets must pass the Merchant Navy Medical Examination to ensure they are fit, healthy and have good vision.

NATIONALITY

To apply for this course, you must be a UK resident, or hold a UK settlement visa.

CADET BENEFITS AND EARNING POTENTIAL

BENEFITS

There are many benefits for cadets, both during training and once qualified. While training with Humber Maritime College cadets will benefit from the following:

- Fully-sponsored officer cadet programme
- A unique, challenging and rewarding career
- Earning a wage/training allowance while training at college and at sea
- Training using leading-edge simulators
- Gain seafaring and life skills
- Career progression
- Cadets will have access to all our facilities at the Grimsby Institute, including research facilities, sports centre and gym and refectory
- Cadets will stay at our halls of residence during phase 1 and can opt to stay in halls during the other college phases
- This course leads to a well-paid international career in the Merchant Navy.

EARNING POTENTIAL

The Merchant Navy offers a well-paid career, with superb opportunities to develop personally and professionally.

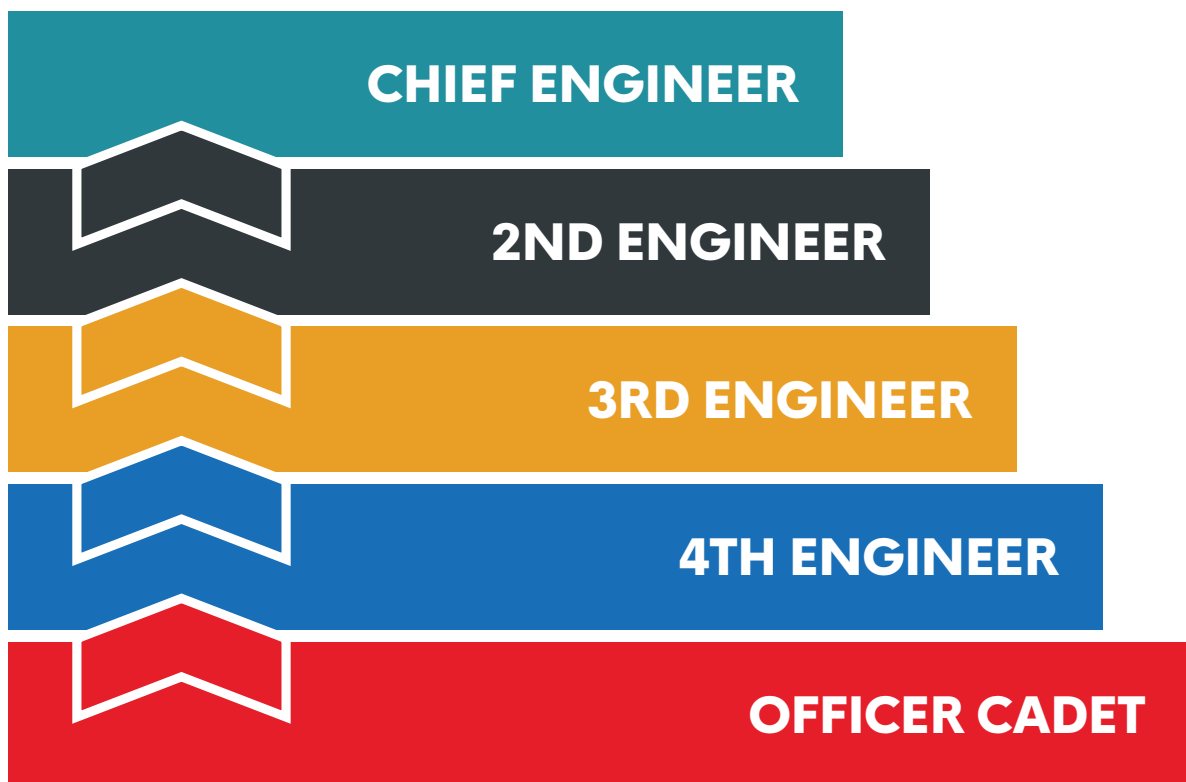
During the cadetship, cadets can expect to earn a good salary, sometimes called a training allowance.

Once qualified, cadets will become junior officers and will earn between £22,000 and £30,000 per year.

As their career develops, a marine Engineering Officer can earn between £40,000 and £80,000, depending on their experience and rank. Salaries may also be tax free through the UK's Seafarers' Earnings Deduction scheme.

CAREER PROGRESSION

Once qualified as a marine Engineering Officer, cadets will normally begin as a 4th engineer and can progress to becoming a chief engineer.



A 4th engineer will work in the ship's engine room and develop skills in this job role as they work their way up to becoming a chief engineer. Those who are aspiring to a higher position in the industry will need to complete further training and examinations.

Marine engineers can also progress in their career if they prefer to work onshore. Onshore marine engineers can use their skills, for example, as an assessor or marine surveyor without the need to work at sea.

With your industry experience and professional qualifications, a wide range of engineering work both onshore and at sea will be available to you.

CADET ACCOMMODATION

While studying at Humber Maritime College, cadets will stay at our halls of residence for the first phase and may choose to return for subsequent phases or rent local housing. Cadets will use part of their training salary/allowance to pay for their accommodation. Staying in halls prepares cadets for an independent lifestyle before going out to sea.

Cadets will stay in Humber Lodge which is our largest halls of residence. The building is made up of the original house, with a large, modern extension attached. There are communal kitchens, showers and toilets on all floors for ease of access for residents. The main common room is a large lounge on the ground floor for residents to relax, watch television and work. **Cadets must be 18 to stay in our halls of residence.**

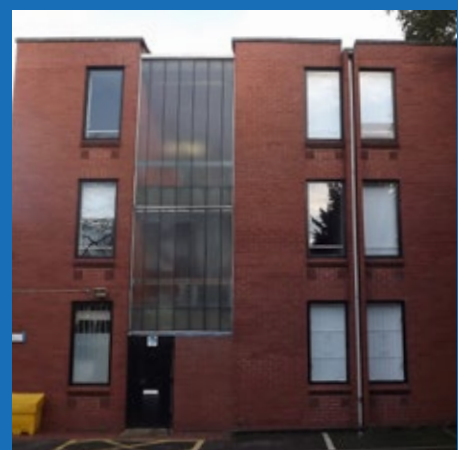
ROOM TYPE	PRICE PER WEEK
Single Standard	£82.82

The accommodation has a car park on site, free for residents to use with barrier access. Humber Lodge is located just across the road from our Grimsby Institute campus and a 15-minute walk into the town centre.

The bus will pick up cadets for sessions at Humber Maritime College and is provided free of charge.

BENEFITS OF LIVING INDEPENDENTLY WITHIN OUR HALLS OF RESIDENCE:

- Great sense of community, where you can mix with and meet new people
- Our halls of residence is safe and secure, with 24-hour security and CCTV
- Great facilities at our university campus
- Out-of-hours support and maintenance for security, maintenance and pastoral care.





HOW TO APPLY

Your cadetship will be managed by a training management company or by a shipping firm who provide the sponsorship for your training. A list of sponsoring companies can be seen on www.careersatsea.org and Humber Maritime College works with these companies and can liaise with them on your behalf.

Training management companies each manage cadets on behalf of a number of shipping firms and we work closely with the following:

Clyde Marine Training

Scotia House, 6 Murdoch Drive, Clydebank, Glasgow, G81 2QQ
0141 427 6655 | clydemarinetraining.com

Ship Safe Training Group

The Precinct Office, The Precinct, Rochester, ME1 1SR
01634 820820 | sstg.org

Chiltern Maritime Limited

Ground floor 2000 Lakeside, North Harbour, Portsmouth, PO6 3EN
0300 303 3696 | chilternmaritime.com

To start the process to join Humber Maritime College as a cadet please head to our website and follow the application process.

Please call Humber Maritime College on **01469 420987** or email us at info@humbermaritimecollege.ac.uk for more course information.

humbermaritimecollege.ac.uk



@MaritimeHumber



@HumberMaritimeCollege



@Humber_Maritime_College



WHERE TO **FIND US**





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Disclaimer: All details printed in this guide and accompanying documents are correct at the time of printing. The TEC Partnership reserves the right to make changes to any cost quoted, structure and content of courses, including the amalgamation or cancellation of classes, as deemed necessary.

