Marine Engineering
Innealtóireacht Mhuirí

Location: National Maritime College of Ireland, Ringaskiddy, Co Cork
Application: CAO
CAO Code: MT 764
NFQ Level: 7
Award Title: Bachelor of Engineering in Marine Engineering
Duration: 3 years plus approximately 1 year work placement
Places: 40

Entry 2023

SCORE THE NECESSARY CAO POINTS AND MEET
MINIMUM LEAVING CERTIFICATE REQUIREMENTS
5 SUBJECTS

SUBJECTS O6/H7	SUBJECTS H5	MATHS GRADE	ENGLISH OR IRISH GRADE
5	0	O6/H7	O6/H7

Applicants must pass the approved medical fitness and eyesight tests as specified by the Irish Maritime Administration of the Department of Transport, and are strongly advised to attend a career advisory session. For further information, please visit the Admissions section in this prospectus.

Overview

The function of the marine engineer is to operate and maintain the engines, boilers, generators and other systems of ships. Most of the mechanical equipment aboard ship is operated and maintained by marine engineers. This course aims to provide a sound knowledge base of marine engineering.

As well as lectures, training is provided in marine, electrical, welding and mechanical workshops, supplemented with practical work in the College engine room, and simulation exercises in the machinery and cargo handling simulation suites.

Students who successfully complete year 1 and 2 are expected to be placed in a commercial ship, for practical training experience, and to gain the necessary 'seatime' for the Department of Transport Certificate of Competency, in their third year. In addition, while at sea, students must complete a comprehensive workplace training programme including training records, journals and other documents associated with the training programme, as specified from time to time.

It should be noted that while every endeavour will be made to secure a suitable sea training berth, this is outside the control of MTU/NMCI and the College cannot accept responsibility for difficulties in securing such a berth.

Further Studies

There are opportunities for further study in order that cadets will progress from the Officer of the Watch Level on to the Second Engineer Officer Certificate of Competency (CoC), and in due course to the Chief Engineer Officer Certificate of Competency with a combination of sea service, further study, and examinations.

Question Time

How do I go about getting a shipping company to sponsor me while I am in college?
Securing sponsorship is a competitive process managed by NMCI, with shipping companies. The number of sponsorships varies each year, depending on shipping company requirements. NMCI has a strong track record in securing sponsorships, however they are not guaranteed.

Do I have to work for the shipping company once I graduate?
The commitment from the sponsoring company usually ends upon graduation. However, a significant number of graduates go on to work as an officer with their sponsors

How much sea going experience do I need before I can apply to sit for a Chief Engineer's Certificate of Competency?
The minimum is three years on suitable vessels and voyages.

Contact Information

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For details, see www.nmci.ie

Career Opportunities

Qualified marine engineers are highly sought after both at sea and ashore. Seagoing roles can include work as marine engineers on oil & gas offshore support vessels, super and mega yachts, cruise ships, and offshore wind farm support vessels. Shore roles include engineering surveyor, engineering management roles in the ports sector, the energy sector and in facility engineering for the pharmaceutical, power stations, refinery, dairy and hospital sectors.

First Year at a Glance

- Introduction to Marine Engineering: the principles and practical aspects of marine engineering systems found on board ship
- Physics for Marine Engineers: giving an enhanced understanding of the physics principles underlying all engineering practice
- Mechanics: basic principles of forces and movements that are fundamental to engineering design and understanding why certain materials are chosen for different engineering applications
- Mechanical Workshop: a practical workshop module which gives a fundamental understanding of materials and the fabrication of designed components
- Technological Mathematics
- Introduction to Thermodynamics: learn how to apply the First Law of Thermodynamics and distinguish between the concepts of heat and temperature
- Electrical and Electronic Principles: gives students an understanding of the principles of basic electrical and electronic components and circuits
- Marine Power Systems: gives students an understanding of ships' power generation and distribution systems as well as a practical understanding of wiring basic control systems

www.mtu.ie/MT764