

# Marine Engineering

## CR 095 Level 7 Award

>> Progression to Chief Engineer Officer

**Application:** CAO

**Award Title:** Bachelor of Engineering in Marine Engineering

**Duration:** 4 Years including one year work placement

**Places:** 30

**Location:** National Maritime College of Ireland,  
Ringaskiddy, Co. Cork.

**CAO Points in 2014: Round 1: 270 / Final: 270**

### Minimum Entry Requirements Leaving Certificate in 5 Subjects

Subjects D3 (O/H)	Subjects C3 (H)	Maths Grade	English or Irish Grade
5	0	D3(O/H)	D3 (O/H)

**Note 1:** The programme is normally available only to Irish citizens and EU citizens who are ordinarily resident in Ireland unless prior support is obtained from a recognised/ approved Shipping Company.

**Note 2:** Applicants for this course must pass the approved medical fitness and eyesight tests as specified by the Maritime Safety Directorate of the Department of Transport, Tourism and Sport and are recommended to attend a career advisory session. Offer of a place on the course will be subject to passing the Medical and Eyesight Tests at the time of offer.

**Note 3:** Applicants, other than those indicated in Note 1 above, will need to be sponsored and provide an IELTS score of 6.5, and also meet the medical requirements for a sea going career.

**Note 4:** Applicants should note that in order to qualify for an Officer of the Watch Certificate of Competency (CoC), the Department of Transport, Tourism and Sport has set additional criteria with respect to minimum pass marks, academic progression and students with dyslexia. Further details on these requirements are available on application to the Head of Department, Maritime Studies, NMCI.

**Note 5:** Applicants who are non-Irish citizens should ensure that they qualify for the issuance of a Seafarers Discharge Book in their home country.

### What is Marine Engineering?

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.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Engineering, and English.



### Student Testimonial

*"NMCI has great facilities from which to gain practical experience which I find invaluable for starting off my career at sea. Specialised training facilities are also available on the campus, for example fire fighting and sea survival training."*

**Tomas Crowley**

### 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 1: Basic principles of forces and movements that are fundamental to engineering design
- Mechanical Workshop 1: A practical workshop module which gives a fundamental understanding of materials and the fabrication of designed components
- Technological Mathematics - offers great support to students in the first year of the engineering programme.



## Module Information [www.cit.ie/modules/cr095](http://www.cit.ie/modules/cr095)

CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

### Work Placement

On completion of Year 2, students partake in work placement at sea for a minimum of 9 months in a 14 month period.

### Potential Areas of Employment

- Ship's Officer (from Junior Ranks to Chief Engineer)
- Marine Superintendent
- Marine Consultant/Surveyor
- Power Plant Engineer

### About the Course

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 'seatetime' for the Department of Transport, Tourism and Sport Certificate of Competency, in their third year. In addition while at sea, they 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 suitable sea training placement, this is outside the control of CIT/NMCI and the College cannot accept responsibility for difficulties in securing such placement.**

### Further Studies

For details, see [www.nmci.ie](http://www.nmci.ie)

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.

### Career Opportunities

Graduates first become Officer of the Watch on a vessel after graduating and passing relevant examinations. They can advance to Second Engineer or Chief Engineer with further study, examinations, and sea service. Careers exist on all different type of ocean going vessels: bulk carriers, oil tankers, container ships, cruise ships, and ferry vessels.

### Contact Information

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W: [www.nmci.ie](http://www.nmci.ie)

### Question Time

#### How do I go about getting a Shipping Company to sponsor me while I am in College?

The College endeavours to place students with shipping companies and has been successful to date.

#### Do I have to work for the Shipping Company once I graduate?

The commitment from the sponsoring companies 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 CoC?

The minimum is approximately three years on suitable vessels and voyages.

## Graduate Profile

**Eoin O'Sullivan**  
Senior Marine Engineer



Eoin graduated in Marine & Plant Engineering. He is currently serving as a Chief Engineer on a speciality vessel (FPSO) in the production and storage area of exploration off the coast of Brazil, working one month on and off.

Eoin obtained the Chief Engineering Certificate of Competency. Eoin found the College facilities excellent. "Most of the lecturers have spent time at sea and use their experience to teach their skills. The standard of education is very high."

NMCI Open Day 22 October

