**Marine Electrotechnology**

**CR 805 Level 7 Award**

> Progression to Electro Technical Officer on ocean-going vessels

**Application:** CAO  
**Award Title:** Bachelor of Engineering in Marine Electrotechnology  
**Duration:** 3 Years + approx. 1 Year work placement  
**Places:** 10  
**Location:** National Maritime College of Ireland, Ringaskiddy, Co. Cork.  
**CAO Points in 2014:** Round 1: 220 / Final: 205

### Minimum Entry Requirements  
**Leaving Certificate in 5 Subjects**

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<th>Maths</th>
<th>English or Irish Grade</th>
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**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 Electrotechnology

An Electro Technical Officer (ETO) operates, maintains and calibrates all electrical, electronic and ships equipment. The ETO’s role is not restricted to the engine room and may also work on complex systems located throughout any vessel.

### Helpf ul Leaving Certificate Subjects

- Mathematics
- Physics
- Engineering
- English

### Work Placement

On completion of Year 2, students undertake work placement at sea for a minimum of 9 months.

### 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: This is a practical workshop module which gives a fundamental understanding of materials and the fabrication of designed components.
- Shipboard Management for ETOs (Electro Technical Officer): Introduces the student to the work based practices of an ETO and gives an understanding of maintenance systems, legislation and safe working practices.

### Student Testimonial

“The course is very fulfilling, the subjects are incredibly relevant to the real world shipping industry and the training you will get is second to none in this country.”

Jim Duffy
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.

About the Course
This is an exciting new programme introduced in 2009 to cater for the growing need on board ship for a specialist in electrical/electronic/networking systems. There is currently a shortage of these professionals and large shipping companies sponsor our students early in their programmes to meet the shipping company's manning requirements.

The course shares its first two semesters with the CR 095 BEng in Marine Engineering. Having completed Year 1, Marine Electrotechnology students begin specialist electrical and electronic training. As well as lectures, training is provided in a variety of workshops and laboratories. This practical work is given to enhance the students' learning experience. Practical knowledge of fundamental theory is gained in electrical, electronic, communications, and control laboratories. A broad understanding of ships and ships' systems is delivered in electrical workshops and in the College's own engine room.

Students who successfully complete Year 1 and 2 are expected to be placed on a commercial ship, for practical training experience, and to gain the necessary 'seatime' for an internationally recognised Certificate of Competency. While at sea they must complete a comprehensive workplace training programme.

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

Potential Areas of Employment
- Electro Technical Officers
- Marine Electronic Maintenance

Career Opportunities
Electro Technical Officers of a high standard are particularly sought after within the cruise line industry. There are also a number of opportunities ashore in a wide variety of fields including marine electronic maintenance and aviation instrumentation maintenance industries.

Contact Information
Head of Department,
Maritime Studies,
National Maritime College of Ireland,
Ringaskiddy, Co. Cork.
T: +353 (0) 21 433 5612
F: +353 (0) 21 433 5696
E: admissions@nmci.ie
W: www.nmci.ie

Further Studies
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There are opportunities for further study in related fields at the Honours Degree level. Graduates will be well placed to pursue further studies in either electrical or electronic engineering.