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 + approximately 1 Year work

placement **Places:** 20

Location: National Maritime College of Ireland,

Ringaskiddy, Co. Cork.

Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements



Minimum Entry Requirements Leaving Certificate in 5 Subjects

Subjects	Subjects	Maths	English or
O6/H7	H5	Grade	Irish Grade
5	0	O6/H7	O6/H7

Applicants 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.

See Page 3 for further admission information.



What is Marine Electrotechnology

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

Helpful Leaving Certificate Subjects

Mathematics, Physics, Engineering, and English.

Work Placement

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

Potential Areas of Employment

- Electro-technical Officers
- Marine Electronic Maintenance

Fundamental Modules of First and Second Year

- The Marine Electrotechnology Degree shares all but one of its first year modules with the Marine Engineering Degree as graduates will be part of a vessel's Engineering Department and must understand the basics of Marine Engineering.
- Shipboard Management for ETOs: Introduces the student to the work based practices of an ETO and gives an understanding of maintenance systems, legislation and safe working practices
- Electrical and Electronic Principles: Gives students an understanding of the theoretical and practical principles of basic electrical and electronic components and circuits
- Marine Power Systems: This module gives students an understanding of ships power generation and distribution systems as well as a practical understanding of wiring basic control systems





About the Course

This is an exciting programme 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.cit.ie and www.nmci.ie

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.

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

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Question Time

How successful is the College at securing work placement? The College endeavours to place students with shipping companies and has been highly successful to date.

If I graduate with this Level 7 degree, can I further my studies in CIT as an Electronic or Electrical Engineer at Level 8?

CIT has a Recognition of Prior Learning System, detailed information at www.cit.ie/rpl. Applicants may be exempted from modules in courses which are similar.





Sinead Reynolds

Electro-technical Officer

"I graduated from the NMCI in June 2015 with a BEng in Marine Electrotechnology after four years of study, including nine months sea going experience as an ETO cadet. For the final two years of my degree I was sponsored by Northern Marine Manning Services, who placed me on both oil tankers and passenger ships. After graduating from the NMCI I completed my Certificate of Competency exam with the Dept of Transport, Tourism and Sport, and began working for Stena Line as a Junior ETO. I have since been promoted to ETO and have been working for Stena Line ever since."

Sinéad has the proud distinction of being the first female to graduate from the BEng in Marine Electrotechnology Programme at NMCI.

National Maritime College of Ireland

Admission

CR 094 Nautical Science

CR 095 Marine Engineering

CR 805 Marine Electrotechnology

For admission to a programme, standard applicants must score the necessary CAO points, meet the minimum entry Leaving Certificate requirements, and note the following:

- ⇒ **Note 1:** The programme is normally available only to Irish citizens and EU citizens who are ordinarily resident in Ireland.
- Note 2: Applicants 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, will need to be sponsored by an approved internationally trading shipping company, provide an IELTS score of 6.5, and also meet the medical and eyesight 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. See Marine Notice No. 65 of 2013.

 http://www.dttas.ie/content/clarification-dyslexia-policy-examination-and-assessment-procedures-0
- ⇒ **Note 5:** Applicants who are non-Irish citizens should ensure that they qualify for the issue of a Seafarers Discharge Book in their home country.