

# Nautical Science

## CR 094 Level 7 Award

► Progression to Level 8 Honours Degree & Master Mariner

**Application:** CAO  
**Award Title:** Bachelor of Science in Nautical Science  
**Duration:** 3 and a half Years including seetime  
**Places:** Up to 48  
**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

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 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 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 Nautical Science?

Nautical Science has three main elements: Navigation, Cargo Operations, and Ship Handling. In other words, the conning and control of a ship; the safe operation of a ship, including the protection of life and the environment; Shipboard administration, and the handling, loading and care of cargoes which may be as diverse as petroleum products, general cargo, or thousands of new cars or passengers.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, English, and Engineering.

### Work Placement

There is a mandatory work placement of 12-15 months seetime in Year 2.

### Potential Areas of Employment

- Ship's Officer (from Junior Ranks to Captain)
- Harbour Master/Pilot
- Marine Surveyor
- Maritime Studies Lecturer

### First Year at a Glance

- Navigation & Meteorology: an introduction to both celestial and terrestrial navigation, together with an understanding of meteorology, as it relates to the seafarer
- General Ship Knowledge: elements of ship construction, stability and cargo operations
- Applied Nautical Science: the application of science and physics as it relates to the marine environment
- Seamanship: the theory and practice of seamanship, having regard to safe working practices
- Introduction to Shipboard Safety: includes short-course elements relating to fire-fighting, sea survival, and first aid training
- Bridge Watchkeeping: an introduction to the theory and practice of keeping a safe navigational watch, having regard to the International Regulations for the Prevention of Collisions at Sea



## About the Course

This course is designed for those who wish to pursue a career as a Deck Officer aboard ship. It provides a comprehensive education in navigation and other ship board activities. Students who successfully complete Year 1 can expect to be placed on a series of commercial ships in Year 2, gaining fifteen months seetime for practical training experience, and to gain the necessary 'seetime' for the Department of Transport, Tourism and Sport Certificate of Competency. In addition, 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 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

BSc (Ordinary) degree Level 7 - suitably qualified Nautical Science graduates may continue their studies and obtain the BSc (Honours) Nautical Science degree and Chief Mate professional qualification, as an add-on year.

## Career Opportunities

Graduates first become Officer of the Watch on a vessel after graduating and passing relevant examinations. They can advance to Chief Mate or Ship's Captain with further study, examinations, and seetime. Careers exist on all different type of ocean going vessels: bulk carriers, oil

tankers, container ships, cruise and ferry vessels. There are also careers on specialist vessels, such as seismic and exploration ships, pilot vessels, tugs, and mega yachts.

## Contact Information

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## Question Time

**How successful is the College at securing work placement?**  
Very successful. Suitable qualified personnel with relevant qualifications are always in demand in the industry.

**How do I go about getting a training berth to sponsor me while I am in College?**  
The College endeavours to place all students on vessels. To date it has been successful.

**Do I have to work for the training berth 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 Master's Certificate of Competency?**  
A minimum of 36 months sea service is required to progress to Ship's Captain. With leave and further study requirements, this sea service takes six to seven years to complete.



## Catriona Dowling

Harbour Master

Catriona is a graduate of both the Level 7 and Level 8 BSc in Nautical Science programmes. During her seagoing career, Catriona sailed on a wide variety of vessels including a survey vessel, lighthouse tender, general cargo vessel, passenger/RO/RO vessel, ferries, and cruise ships. After graduating with the Level 8 Honours Degree, Catriona obtained her MCA Master Mariner (Master Unlimited) Certificate of Competency qualifying her to command her own vessel as Captain/Master Mariner.

On coming ashore Catriona began working as an Assistant Harbour Master and was later promoted to Deputy Harbour Master in Belfast Harbour before taking up her newest role as Harbour Master in Warrenpoint Harbour. Catriona is the first female Harbour Master of a large commercial port in the history of the Island of Ireland.

Catriona is the recipient of the 6th CIT Faculty of Engineering & Science STEM Graduate Achievement Award.

# 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.