

**Reference No**

048/230

**Duration**

34 weeks  
(28 weeks  
excluding ISSC,  
CBRNDC5, DOC,  
NMT 101, JOLC)

**Location**

HMS SULTAN

**IELTS**

6.5

**Frequency**

2 courses per  
year  
(Sep and Jan)

# SYSTEMS ENGINEERING & MANAGEMENT COURSE (MARINE ENGINEERING) (SEMC(ME))

**AIM OF COURSE**

To provide Graduate Officers with a knowledge of the principals of the design, construction, operation and maintenance of Marine Engineering equipment and systems such that they can undertake the duties of the Deputy Marine Engineering Officer in a small ship or Section Officer in a large ship.

**OUTLINE SYLLABUS**

- ◆ Construction, maintenance and operations of equipments and associated systems, including:
  - ◆ Gas turbines, diesels, transmissions, electrical propulsion systems, ship electrical systems, steering & stabilisers, AC generation & distribution, converted supplies, controls, refrigeration & air conditioning, hydraulics, desalination, compressed air and hull systems
- ◆ Craft/Workshop skills appreciation:
  - ◆ Fitting & turning
  - ◆ Sheet metalwork
  - ◆ Pipework
  - ◆ Welding & cutting
  - ◆ Composites and woodwork
- ◆ Stability, docking/undocking, condition based monitoring, NDE/NDT, nuclear propulsion, signature reduction, engineering administration, ship husbandry and MARPOL
- ◆ Practical switchboard operation and ship duty watch exercises
- ◆ ISSC, Divisional Officers Course, NMT101, CBRNDC5, JOLC

**ENTRY STANDARDS**

- ◆ Degree in Engineering
- ◆ To be computer literate in Microsoft Word and Excel, or equivalent
- ◆ Minimum of 6 months general sea experience is preferable
- ◆ Minimum of 6 weeks practical experience with service equipment (Marine Engineering) is preferable

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**EXAMS/QUALIFICATIONS GAINED**

- ◆ Formal assessments are conducted throughout the course

**REMARKS**

Proof of educational qualifications will be required on joining. In order to take this course, students must be medically fit and pass the Royal Navy Fitness Test.

This course includes external visits which involve travelling expenses.