



Marine Engineer Class 2

Introduction

This training course is aimed at preparing ships engineer officers to perform, second engineer officer duties, as required by regulation III/3 of the STCW Convention 1978 as amended or be Chief Engineer on vessels with propulsion powers up to 3000KW, as stipulated in regulation III/3 of the STCW Convention and Code as amended. Every candidate for certification as second engineer, in-charge of a watch in a manned engine-room or as designated duty engineer in a periodically unmanned engine-room or be chief engineers of ships powered by main propulsion machinery up to 3000 kW, shall perform the duties of monitoring and operating all kinds of ships power plants, ranging from mechanical, electrical, hydraulic, refrigeration plant, pumping systems, ventilations systems and control equipment.

Along with the knowledge and practical trade skills, the engineer officer needs to have good people skills, communication skills and be the kind of person who's decisive, calm and able to inspire confidence in others in a complex modern ships machinery space.

Objectives

This training integrates the management aspects into the operations, practical maintenance work and watch-keeping responsibilities, to enable candidates to have the required knowledge, understanding and skills to competently perform second engineer duties or chief engineer duties for ships propulsion power up to 3000 Kw.

Outline

This course content will cover the following areas.

1. **Marine Engineering at management level**
 - a. Maintain a safe engineering watch.
 - b. Use of English in written and oral form
 - c. Use of internal communication systems
 - d. Operate main and auxiliary machinery and associated control system
 - e. Operate fuel, lubrication, ballast and other pumping systems and associated control systems
2. **Electrical, Electronic and Control Engineering at management Level**
 - a. Operate electrical, electronic and control systems
 - b. Maintenance and repair of electrical and electronic equipment
3. **Maintenance and repair at management level**
 - a. Operate use of hand-tools, machine tools and measuring instruments for fabrication and repair onboard.
 - b. Maintenance of ship board machinery and equipment
4. **Control the operation of the ship and care of persons on board at management level**
 - a. Ensure compliance with pollution prevention requirements.
 - b. Maintain the seaworthiness of the ship
 - c. Prevent control and fight fires on board

- d. Operate lifesaving appliances
- e. Apply medical first aid on board
- f. Monitor compliance with legislative requirements
- g. Application of leadership and team working skills
- h. Contribute to the safe of personnel and ship

5. Supporting knowledge

- a. Naval Architecture
- b. Mathematics
- c. Thermodynamics
- d. Mechanical science
- e. Industrial chemistry

Course Outcomes

After successful completion of the course the engineer will have the understanding and competency to perform engineering watch duties at management level for ships propulsion power up to 3000KW, covering:

1. Marine engineering
2. Electrical, electronic and control engineering
3. Maintenance and repair
4. Controlling the operation of the ship and care for persons on board

Pre-requisite

The candidate needs to have completed:

- Upper Secondary School having good grades in Math, Science and English language, both spoken and written.
- Candidates must have completed 12 months seagoing service as an Engineer Officer whilst holding an EOOW III/1 Certificate of Competency on vessels of at least 750 KW in engine power.

Training Facilities

Classroom lessons and simulation activities are to be closely related to modern ships engine room machinery settings, auxiliary machinery and associated systems related to sea environment.

Certificates

On successful completion of the course and passing the mandatory written and oral examinations, candidates will be issued the Engineer Class 2 certificate of competency as per STCW Regulation III/3, as amended, by NMSA.

Training Details and Costs

Duration:	12 months
Time:	08.00am to 04.00pm
Tuition Fees:	TBA
Venue:	PMTC, Konedobu
Min number of persons:	10 persons

For further information please contact:

Hayley Kana, Registrar

Phone: 72320725/76218379

Email: pmtcregistrarhk@gmail.com