PACIFIC MARITIME TRAINING COLLEGE

"Your Training Solution"

Engineer 4

Introduction

This training will provide the participants with the knowledge and skills required to safely operate propulsion plant (s) and auxiliary equipment on a vessel or can be a chief engineer on vessels with propulsion power up to 500KW. This training shall prepare the marine engineer to perform the duties of operating and monitoring the mechanical, electrical, and hydraulic, refrigeration plant, pumping systems, air conditioning systems, ventilation systems, control equipment and in addition to take charge of engine room watch. It will also be aimed at providing the marine engineer with the essential theory and practical knowledge to be resourceful in operating and solving ships machinery problems related to mechanical, hydraulic, pneumatic systems, electrical systems and issues with ships stability. This training will enable the marine engineer to manage the ships fuel systems, to calculate fuel consumption and storage requirements on vessels.

Objectives

The aim of the course is to integrate theory with analytical knowledge, practical maintenance work and problem solving exercises to prepare participants with the knowledge, skills and attitude to competently perform watch keeping duties as part of the engine room team in a ships engine room or be chief engineer on vessels with propulsion power up to 500KW operating on the coastal trade.

Outline

This course content will cover the following areas.

1. **Sea Safety course**
   a. Sea survival and survival techniques (STCW Code Table A-VI/1-1)
   b. Intermediate level firefighting for Officers (STCW Code Table A-VI/1-2) and sections of STCW Code Table A – VI/3.
   c. First aid (STCW Code Table A-VI/1-3) and medical care (STCW A – VI/4-1)
   d. Occupational Health and Safety (STCW Code Table A-VI/1-4)
   e. Social responsibility (STCW Code Table A-VI/1-4)
   f. Basic maritime security awareness (STCW Code Table A-VI/6-1) (If required)
2. **Electro technology**
   a. Operate ships electrical and control systems
   b. Carry out basic maintenance and repair of electrical equipment
3. **Practical workshop and ship board projects**
   a. Practical engine shop
   b. Practical Electrical work-shop,
   c. Fabrication work-shop and
   d. ship-board systems
4. **Motor engineering**
   a. Maintain marine engines below 500 KW
   b. Operate marine engines below 500 KW
5. **General Engineering Knowledge**
   a. Maintain all machinery in engine room.
   b. Maintain all machinery on deck
6. **Naval Architecture and ship construction**
   a. Basic vessel design and construction
   b. Stability principles and terms associated with vessels
7. **Basic engineering science**
   a. Mathematics
   b. Heat and Heat Engines
   c. Mechanical science

Course Outcomes

After successful completion of the course the trainee will have the understanding and competency to perform engineering watch duties for ships or be chief engineers on vessels with engine propulsion powers up to 500 KW sailing on domestic trade.

Pre-requisite

The candidate needs to have completed:

- Upper Secondary School having good grades in Math, Science and English language, both spoken and written.
- Successfully completed the Engineer 5 course or MTP 1 course and
- Gained the appropriate sea service period as a marine engineer.

Training Facilities

Classroom lessons, simulation activities and 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 4 certificate of competency by NMSA.

Training Details and Costs

Duration: 7 months
Time: 08.00am to 04.00pm
Tuition Fees: TBA
Venue: PMTC, Konedobu
Min number of persons: 10 persons

For further information please contact:
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