



This course is intended for deck officer and ratings. It aims to provide participants with basic working knowledge of the engineering aspects of ship's operation and operating principles of machineries and equipment that are highly essential and directly complements with deck systems & activities. It covers basic principles and requirements of diesel engine operation, refrigeration system, hydraulic & pneumatic technology, and auxiliary equipment.

COURSE AIMS & OBJECTIVES: Upon completion of the course, participants should be able to:

- Understand the basic principle of a diesel engine operation generic to manned and unmanned operation
- Describe the requirements for the engine operation during arrival, departure and in port condition
- Differentiate between the "Low Load Operation" and "Economical Operation" of the main engine;
- Explain how the power is generated and how to supplements the power requirements during specific operation, e.g. bow thruster operation
- Understand the basic operation of the refrigeration cycle and fresh water (FW) generator and be able to use these two systems as a model to understand and read a system flow/piping diagram
- Understand the operation of deck machineries operated hydraulically and pneumatically and, recognize hydraulic and pneumatic symbols to understand and read diagram for trouble shooting
- Recognize the importance of following maintenance activities for the ship's economical operation

COVERAGE / PROGRAM FOCUS: The course deals with the following subject & training areas:

- Diesel Engine: Principles of Operation
- Fuel Oil / Lube Oil System and Requirements
- Boiler Water/ Cooling Water System
- Refrigeration: Operating Principle
- Operation of Fresh Water Generator
- Basic Pneumatic Technology
- Basic Hydraulic Technology

ENTRY REQUIREMENT / TARGET GROUP: Entry to this course is open to all deck officers as well as rating

COURSE CERTIFICATE: A Certificate of Completion is given to each participant who satisfactorily fulfills the Course.

DURATION:

4 Days
(0830H - 1600H)

SCHEDULE:

This course shall be conducted only upon request with minimum of five (5) participants.

COURSE

CONTRIBUTION:
USD 490.00

Inclusive of course materials/handout

