



Engine Department Introductory Course

Ten consecutive Wednesday Evenings

Fm 22 July 2020 to 23 September 2020

Course Outline and About the Instructor

Course Outline

General Introduction to Engine Room and Machineries in relation to ship on 22 July 2020 (Wednesday)

- Layout – Engine Room , Engine Control Room, Steering Room, Boiler

Propulsion on 29 July 2020 (Wednesday)

- a. Main Engine
- b. Drive Shaft
- c. Propeller
- d. Bearing System

Ship Control on 5 August 2020 (Wednesday)

- Steering gear - Hydraulic System - Rudder - Telemotor

Auxiliary Machinery (I) on 12 August 2020 (Wednesday)

- a. Fuel Oil System
- b. Bunkering, sampling method etc
- c. Lub oil system
- d. Cooling system - sea water – fresh water

Auxiliary Machinery (II) on 19 August 2020 (Wednesday)

- e. Electricity Generation System – Generators - Emergency Generator - Batteries – UPS –
- f. Electricity Distribution System
- g. Pneumatic System - Air start, Pneumatic actuators, Valves
- h. Ventilation systems

Hotel Services / Life Support on 26 August 2020 (Wednesday)

- a. Domestic Water system – Hydrophors, Water Generation
- b. Sewage / waste water handling system
- c. Food - Galley + Refrigeration + Garbage + Incinerator
- d. Air conditioning + Heating system



Pollution Prevention Systems / MARPOL requirements on 2 September 2020 (Wednesday)

- a. Bilge Water System
- b. Waste Oil System
- c. OWS – Incinerator
- d. Sewage Systems
- e. Ballast & Air Pollution

Safety systems on 9 September 2020 (Wednesday)

- a. Fire fighting system – Sea water, CO2, Fixed Foam, Sprinklers
- b. Prevention - Construction , Design, Detection systems
- c. Flooding - bilge alarms

Deck Machinery on 16 September 2020 (Wednesday)

- a. Hatch covers
- b. Winches / Windlass / Anchors
- c. Cranes

Manning, Watchkeeping and Maintenance on 23 September 2020 (Wednesday)

- a. What to monitor?
- b. What do watch keepers do?
- c. What is UMS
- d. Maintenance – Planned / Condition / Breakdown; requirements, limitations
- e. Drydocking

About the Instructor

SHARAD GUPTA

FICS, FIMarI(I), MIMarEST, MHKIMT

Chartered Shipbroker

Sharad brings nearly 25 years of maritime experience with him.

Having started as a shipboard engineer in 1995 with Chevron Transport Corporation, he rose to the rank of Chief Engineer before settling ashore in 2006 with Mediterranean Shipping Company as a Technical Superintendent.

While progressing through the shore-based career in a technical role, Sharad worked on developing and expanding his skill-set. In 2012, he was awarded the Membership of Institute of Chartered Shipbrokers. In 2017, he also completed an Executive Leadership Programme with Stanford University, California.

A firm believer in Hong Kong's potential to become even more important on the maritime map of the world, Sharad has been an active participant in the HK Maritime Week, a regular teacher at ICS Preparatory Course as well as a guest faculty with the MPPF Classes for budding mariners in HK.

Sharad is also a regular contributor to maritime publications and a regular speaker at industry seminars.