



*Training Course:  
Navigation for Non-Navigators and Maritime  
Technical knowledge for GMs and CEOs*

*27 - 31 May 2024  
Cape Town (South Africa)  
DoubleTree by Hilton Cape Town - Upper Eastside*

## Training Course: Navigation for Non-Navigators and Maritime Technical knowledge for GMs and CEOs

Training Course code: MM234898 From: 27 - 31 May 2024 Venue: Cape Town (South Africa) - DoubleTree by Hilton Cape Town - Upper Eastside Training Course Fees: 7140 € Euro

### Introduction

This course provides a broad experiential introduction to maritime skills.

Candidates will explore a variety and range of knowledge enhancement of people working in the maritime sector.

There's an introduction to marine navigation, where candidates learn how to use a marine chart to plot position using standard marine instruments, and how to take account of the weather.

The safety aspects of any job in the maritime sector are tackled in the Unit Health and Safety in the Maritime Sector, including safe working practices on board a ship, life-saving principles, basic first aid, and basic fire safety. The Unit also covers the basic engineering involved with small boats, such as pumping and steering mechanisms reviewed and the routine care and maintenance of the engine and auxiliaries on a boat.

### Training Objectives

At the end of this training program participants will learn:

- The basics of navigation.
- Navigation branches.
- What are the direction measurements instruments, and speed measurements?
- What are the depth measurement devices and their types and scope of work?
- What are the electronic instruments that are used in navigation?
- Plotting and positioning using different techniques.
- Comprehend the health and safety measurements in ship operations.
- The safe working practices on board the vessels
- Basic Engineering and General Engineering Knowledge
- Shipboard Equipment and Systems and Propulsion

### Methodologies

Central to the Course is developing the competencies valued by employers in general and necessary for effective work in the maritime sector. These skills are embedded in the different Units, providing candidates with the opportunity to practice and develop these skills through practical and team-working activities in real or simulated working environments and investigations throughout the Course. Candidates will also evaluate their own skills, seeking feedback from others, identifying areas of improvement, taking account of feedback received, and reviewing their progress throughout the Course.

### Course outlines

#### Module 1: Navigation for Non-Navigators

##### Day 1

## Introduction to Navigation

- The shape of the earth.
- Poles
- Equator
- Parallel of latitude
- Meridians
- Latitude and Longitude
- D<sup>o</sup>Lat and D<sup>o</sup>Long
- Distance
- Units of Measurements
- Geographical Mile
- Nautical Mile
- Knots

## Branches of Navigation

- Deck Reckoning
- Piloting
- Electronic Nav
- Celestial Navigation

## Direction Measuring Instruments

- Compass
- Magnetic Compass
- Gyro Compass
- Gyro Compass Repeaters
- Bearing Circles
- Azimuth Circles
- Pelorous Dumb Compass
- Alidade

## Speed Measuring Instruments

- Taffrail Log
- Pito-static Log
- Engine revolution Counter
- Short Range Measuring Devices

## Day 2

### Depth Measuring Device

- Head Lead
- Deep Sea Lead
- Sounding Machine
- Echo Machine FATHOMETER

### Electronic Instruments

- Radio Receiver

- Radio Direction Finder RDF
- Radio Detection and Ranging RADAR

#### Navigation

- Coastal Navigation Terrestrial Navigation
- Celestial Navigation Astronomical Navigation
- Radio Navigation
- Satellite Navigation

#### Plotting and Positioning

### Module 2: Maritime Technical knowledge for GMs and CEOs

#### Day 3

##### Safe working practices on board a ship

- Safety regulations and standards
- Accidents and incidents - the statistics
- Safety and environmental protection
- Communications
- Damage control
- Elementary first aid
- Emergency equipment
- Environmental awareness
- Fire Detection and Fire Fighting Systems
- Hazardous materials

##### Main Engines & propulsion System

- Ship Systems
- Prime and/or Secondary Propulsion Units/Movers
- Damping
- Flexible Couplings
- Gearboxes
- Shafting
- Propeller
- Diesel Engines

- Diesel-Electric
- Turbines

#### Day 4

##### Power Generation and Distribution

##### Auxiliary Machineries and Systems

- Pipes, Fitting, and Valves Separator
- Pumps Types
- Fans and Blowers
- Heat Exchangers and Compressed Air
- Starting Systems
- Anchor Windlasses
- Rudder Systems and Machinery
- Fire extinguishers and fighting systems
- Inert gas systems
- Evaporators and distilling plants
- Refrigeration rooms
- Air conditioning principles.

#### Day 5

##### Deck Equipment and Machinery

- Deck Crane/Cargo Rail Crane
- Hydraulics Systems
- Launch and recovery systems
- Rig anchor
- Mooring Winch
- Stabilizers
- Steering Gear SR/RV

##### Fuel, Lube Oil, Freshwater, and Sea Water Systems

##### Sewage Treatment Plant, Black, and Gray Water Systems

## Registration form on the Training Course: Navigation for Non-Navigators and Maritime Technical knowledge for GMs and CEOs

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

### Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....  
Position: .....  
Telephone / Mobile: .....  
Personal E-Mail: .....  
Official E-Mail: .....

### Company Information

Company Name: .....  
Address: .....  
City / Country: .....

### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....  
Position: .....  
Telephone / Mobile: .....  
Personal E-Mail: .....  
Official E-Mail: .....

### Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
- ☐ Please invoice my company

### Easy Ways To Register

Telephone:  
+201095004484 to  
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registration  
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E-mail to us :  
info@gh4t.com  
or training@gh4t.com

Complete & return the  
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to: Global Horizon  
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