



# Training Course: Principles of Marine Hydrographic

13 - 17 July 2025 Istanbul (Turkey) DoubleTree by Hilton Istanbul Esentepe

www.gh4t.com



# Training Course: Principles of Marine Hydrographic

Training Course code: MM235295 From: 13 - 17 July 2025 Venue: Istanbul (Turkey) - DoubleTree by Hilton Istanbul Esentepe Training Course Fees: 6500 D Euro

### Introduction:

The Marine Hydrographic Training Program aims to provide participants with a comprehensive understanding of marine hydrography, its methodologies, tools, and applications. Participants will learn about the importance of hydrographic surveys in maritime navigation, safety, resource exploration, environmental protection, and scientific research.

# **Target Audience:**

- Hydrographic surveyors
- · Maritime navigators and ship crews
- Marine engineers and geologists
- Environmental scientists
- · Government agencies responsible for maritime safety and management
- · Oceanographers and marine researchers

## **Objectives:**

Upon completion of the training program, participants will be able to:

- Understand the principles and concepts of marine hydrography.
- Apply various hydrographic survey techniques and technologies.
- Interpret hydrographic data and create accurate charts and maps.
- Identify potential hazards and navigational challenges in marine environments.

## Outlines:

Day 1:

Introduction to Marine Hydrography

• Overview of marine hydrography: definition, importance, and scope



- · Historical development of hydrographic surveying
- Introduction to international hydrographic organizations and standards
- Fundamentals of bathymetry: measurement of water depth
- Types of hydrographic surveys: single-beam vs. multibeam, side-scan sonar, LiDAR, etc.

#### Day 2:

#### Hydrographic Survey Techniques

- Principles of hydrographic survey planning and execution
- Equipment and tools used in hydrographic surveys: echo sounders, GPS, inertial navigation systems INS, remote sensing technologies, etc.
- · Data acquisition methods and procedures
- Quality control and assurance in hydrographic surveys
- · Case studies and practical demonstrations of survey techniques

#### Day 3:

#### Data Processing and Analysis

- Introduction to hydrographic data processing software
- · Data editing, cleaning, and filtering techniques
- Bathymetric data interpolation and gridding
- · Generation of depth contours and 3D models
- Interpretation of hydrographic data for charting and mapping purposes

#### Day 4:

#### Charting and Cartography

- Principles of nautical chart production
- · Introduction to chart symbology and conventions
- Digital charting technologies and electronic navigational charts ENCs
- Techniques for updating and maintaining nautical charts



#### Day 5:

#### Applications of Marine Hydrography

- Role of hydrographic surveys in maritime navigation and safety
- Applications of hydrography in offshore oil and gas exploration, underwater infrastructure development, and marine resource management
- Environmental applications of marine hydrography: habitat mapping, coastal zone management, marine conservation
- Emerging trends and future directions in marine hydrography



# Registration form on the Training Course: Principles of Marine Hydrographic

Training Course code: MM235295 From: 13 - 17 July 2025 Venue: Istanbul (Turkey) - DoubleTree by Hilton Istanbul Esentepe Training Course Fees: 6500 I Euro

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			
<ul> <li>Please find enclosed a chequ</li> <li>Please invoice me</li> <li>Please invoice my company</li> </ul>	ie made payable to Globa	l Horizon	
Easy Ways To Register			
+201095004484 to	ax your completed registration rm to: +20233379764	E-mail to us : info@gh4t.com or training@gh4t.com	Complete & return the booking form with cheque to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt.