Global Horizon
TRAINING CENTER

Training Course:
Introduction to Oil & Gas Refinery Process, Design, and Operation

16 - 20 June 2025
London (UK)
Landmark Office Space - Oxford Street

Training Course:
Introduction to Oil & Gas Refinery Process, Design, and Operation

Training Course code: EN236042 From: 16 - 20 June 2025 Venue: London (UK) - Landmark Office Space - Oxford Street
Training Course Fees: 6500 Euro

Introduction

The oil and gas industry is a cornerstone of the global economy, and refining is the critical link between raw crude oil and valuable products such as gasoline, diesel, and petrochemicals. The "Introduction to Oil & Gas Refinery Process, Design, and Operation" course is meticulously designed by Global Horizon Training Center to provide participants with a strong foundational understanding of refinery operations, core design principles, and practical applications in real-world environments.

Whether you're new to the field or work in supporting departments like marketing, logistics, or finance, this course will bridge the knowledge gap and enhance your ability to understand the refinery value chain, terminology, and operations. The course provides a holistic overview, from crude intake to product dispatch, ensuring cross-functional understanding for technical and non-technical participants alike.

Course Objectives

By the end of this course, participants will be able to:

- Understand the structure and functions of oil & gas refineries.
- Identify key refinery processes and their interrelationships.
- Gain a basic understanding of refinery design considerations.
- Analyze how refinery operations impact business and product marketing.
- Interpret industry terminology and process flow diagrams PFDs.
- Understand the environmental, safety, and economic considerations in refining operations.
- Foster collaboration between technical and non-technical teams in oil & gas organizations.

Course Methodology

The course uses a blend of instructional methods to ensure maximum engagement and retention, including:

- Interactive lectures and multimedia presentations
- Real-world case studies from global refineries
- Simulation exercises on process design and optimization
- Group discussions and knowledge-sharing activities

- Visual aids including flow diagrams, process charts, and video walkthroughs
- Daily knowledge checks and Q&A sessions

Organizational Impact

This course will equip employees from various departments with:

- A unified understanding of refinery processes, enhancing interdepartmental communication.
- Improved decision-making capabilities aligned with operational realities.
- Reduced miscommunication between technical and non-technical teams.
- Enhanced marketing and sales strategies based on refined product characteristics and production capabilities.
- Support for innovation and efficiency initiatives across business units.

Target Audience

This course is ideal for:

- Marketing, sales, and business development professionals in the oil & gas sector
- Junior engineers and newly hired refinery staff
- Operations and maintenance support teams
- Supply chain, logistics, and procurement professionals
- Corporate planners, finance analysts, and strategy teams
- Health, Safety, and Environment HSE professionals seeking context on operational risks

Outlines

Day 1: Overview of Oil & Gas Refining Industry

- Introduction to the oil & gas value chain
- Evolution of refining technology and global refining trends
- Types of refineries: Simple vs. Complex
- Introduction to crude oil types and properties
- Product slate: Fuels, lubricants, petrochemicals, and by-products

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Day 2: Core Refinery Processes

- Atmospheric and vacuum distillation
- Thermal cracking and catalytic cracking
- Hydrocracking and hydrotreating
- Reforming and alkylation
- Desulfurization and blending operations

Day 3: Refinery Design and Equipment

- Basic principles of process design in refineries
- Process Flow Diagrams PFD and Piping and Instrumentation Diagrams P&ID
- Major equipment: Heat exchangers, furnaces, distillation towers, compressors
- Layout considerations and integration of utility systems
- Safety systems and control instrumentation

Day 4: Refinery Operation and Economics

- Feedstock selection and process optimization
- Production planning and scheduling
- Energy management in refineries
- Operational safety and environmental considerations
- Economics of refining: Cost, margin, and profitability analysis

Day 5: Refining in Business Context and Emerging Trends

- Marketing implications of refinery configurations
- Refinery□s role in the supply chain and product availability
- Case study: Linking refinery operations to marketing campaigns
- Digitalization and Industry 4.0 in refining
- Sustainability, emission reduction, and the future of refining

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Registration form on the Training Course: Introduction to Oil & Gas Refinery Process, Design, and Operation

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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 provisionally reserve your place.	Fax your completed registration form 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.