

GLOBAL EXPERTS INSTITUTE FOR TRAINING.
ISO 9001-2008 TRAINING PROVISION CERTIFIED

Oil Production and Processing Facilities

Schedule Dates:

Start Date	End Date	Place
4 Mar 2024	8 Mar 2024	London - DoubleTree by Hilton London Kensington

Program Introduction:

This course focuses on oil & gas production and subsequent treatment surface facility operations and processes. The course covers the entire oil & gas value chain from discovery, exploration, and transportation through to refining and finally sales to downstream industries. An overview and fundamental understanding of the wide range of oilfield production handling and treatment equipment will be presented as well as new technologies.

Program Objective:

- ✓ Learn the origins and chemical characteristics of Oil & Gas
- ✓ Understand the challenges associated with offshore operations, horizontal drilling and other safety concerns
- ✓ Familiarize the participants with various methods and techniques used to explore, drill, produce, treat and transport Oil, Gas and their products
- ✓ Introduce the participants to upstream, midstream and downstream operations
- ✓ Appreciate Oil & Natural Gas treatment technologies and processes including produced water treatment
- ✓ Learn the many processes involved in crude oil refining and how these contribute to refinery complexity and profitability
- ✓ Gain valuable knowledge of Gas Sweetening and Physical Solvents Unit Troubleshooting

Who should attend?

- Chemical, Mechanical engineers and Process Technologists,
- Facility and Inspection engineers
- Maintenance or project engineers
- Operations and Laboratory Chemists
- Technicians, support engineers and engineering trainees
- Consultants and Sales professionals

Program Outlines

Day One

Introduction of Oil & Gas Production Life Cycle:

- The nature and formation of fossil fuels and oil reserves
- Basic petroleum geology- Where we find fossil fuels: Onshore/ offshore
- Type of wells and Reservoir types
- Exploration activities:
 - Exploration well
 - Directional Drilling
 - Drilling Offshore
 - Well Testing & Completion
 - Well Stimulation & Workover

Day Two

Functions Related to Oil & Gas Operations

- The chemistry of fossil fuels and petroleum
- Physical properties of hydrocarbons
- Oil & Gas Gathering and separation
- On-site surface processing,
- Produced Water Generation and Management Practices
- Dew Point Control/Liquids Recovery
- Acid gas injection
- Oil Recovery Methods

Day Three

Chemical Reaction Processes

- Types of Contaminants and General Safety Considerations
- Specifications and process selection criteria
- Hydrates, and Gas Dehydration
- Chemistry of Amine Gas Sweetening
- Alkanolamine Processes Selection and Classification
- Selection Criteria for Acid Gas Removal Systems
- Process Flow Schemes
- General Design Criteria / Guidelines
- General Operating Problems in Amine Proce

Day Four

Common Process Being Used In Gas Plant Industries

- Physical processes:
 - Selexol, Fluor, Rectisol, Purisol
- Alkaline Salt Processes:
 - Hot Potassium Carbonate Plants – Benfield, Catacarb
- Combination Processes:
 - Sulfinol, HiPure
- Batch Processes:
 - Chemsweet, Sulfa-Check, SulfaTreat, Puraspec, Molecular Sieve
- Iron Chelate Processes:
 - LO-CAT, SulFerox
- Liquid Hydrocarbon Treating:
 - Regenerated Caustic, Perco Solid Copper Chloride, Molecular Sieve, Merox

Day Five

Downstream Operations





- Oil & Gas Downstream Operations
- Oil Storage & Transportation
- Crude oil Treatment & Processing
- Refinery Operations & Products
- Petrochemical Industry
- Oil and Gas pricing
- Energy Types, World Energy Review & Global Statistics
- Course review and evaluation

Training Methodology:

- Slide presentations
- Interactive discussion
- Simulations and Gamification
- Online Video material

Cost Quotation in Kuwaiti Dinars

The total cost includes:

-  Instructor(s) expenses
-  Training materials
-  Certification
-  Lunch Buffett

Total Cost: 1350 KD per Participant
(One Thousand Three Hundred Fifty Kuwaiti Dinar)