A - Z of the Petroleum Industry From Upstream to Downstream



Why Choose this Training Course?

This comprehensive course recognizes the need for professionals to have a comprehensive and broad understanding of the Petroleum Industry from A to Z - from upstream to downstream.

Oil and gas are the world's most important energy resources driving the global economy. The processes and systems required for oil and gas production, refining and distribution are highly complex, capital-intensive and require state-of-the-art technology.

This course will serve as an introduction to the petroleum industry and will greatly assist those who need to progress to a detailed knowledge of the industry.

This course will feature: n fo@britishtc.org

- Details of oil & gas processing including exploration, refining, storage transportation and retailing
- Understanding of the value chain from the well to consumer
- Understanding of the fundamental technologies of both upstream and downstream oil & gas industries
- Understanding of the ways the oil & gas industries are organized to operate effectively and efficiently
- Develop the necessary skills to evaluate and make effective decisions related to the oil & gas industry

What are the Goals?

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

- Identify key process operations related to the exploration & production of upstream industry feedstock
- Analyze the key process operations related to refining and production of downstream products
- · Recognize the total spectrum of the oil and gas industry and the challenges faced
- Develop skills to assist in the evaluation of corporate opportunities
- Understand the structure of the oil and gas business

Who is this Training Course for?

This course is designed for both technical and non-technical personnel as well as operational staff at professional levels employed in refineries, petrochemical, and oil and gas process industries. The course is

designed to be of substantial benefit to personnel within the Oil and Gas Industries such as:

- Technologists
- · Mechanical engineers
- · Safety and Inspection engineers
- Operations, Maintenance or project engineers
- Anyone requiring a broad understanding of the structure, operations and economics of the oil and gas industries

How will this Training Course be Presented?

This course will utilise a variety of proven adult learning techniques to ensure maximum understanding, comprehension and retention of the information presented. This course is a hands-on, stimulating learning experience that is highly interactive, with many opportunities to advance ones opinions and ideas. Participation is encouraged in a supportive environment that ensures that the concepts introduced during the course are understood.

The Course Content

Day One: Origins of Petroleum

- · Origins of oil & gas
- · Petroleum chemistry
- Petroleum geology
- Exploration & production of petroleum
- Types of Well
- · Development of Oil and gas fields

Day Two: World Energy Markets

- Pipeline geopolitics
- OPEC (Organization of the Petroleum Exporting Countries)
- EIA (Energy Information Administration)
- Statistical review of petroleum consumption and supply
- Distribution transmission and transportation
- Tank farms and storage

Day Three: Refinery Operations

- Physical separation Distillation
- Chemical conversion processes
- Blending
- Refinery Complexity
- · Refining margins

Day Four: Gas Processing

- Inlet separation, Dehydration/Dewpoint control
- Contaminants & Pipeline Gas specifications
- · Amine Gas Sweetening

- Physical Solvent Processes
- Sulphur Recovery
- Gas compression & Liquefaction

Day Five: Oil and Gas Management

- Cost estimation of oil and gas facilities
- Pricing, Trading, Markets, Risk Management
- Crude Benchmarks & price estimation
- Derivatives Futures, Options and Swaps
- Climate Change & Renewable Energy
- Course Exercises, Evaluation and roundup

