MERCURY

Basic Petroleum Technology Course

7 – 11 March 2027
Cairo (Egypt)



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Amman - Jordan: +962 79 712 3347

Basic Petroleum Technology Course

Ref: 15123_303019 **Date:** 7 – 11 March 2027 **Location:** Cairo (Egypt) **Fees:** 4000 Euro

Introduction:

This basic petroleum technology course provides practical guidance in applying the economic analysis techniques currently used in oil and gas. Techniques for predicting profit, production, costs, and cash flow enable the analyst to evaluate decision alternatives for optimum results. Understanding economic indicators, risk, uncertainty, and different financial structures, such as royalty/tax regimes and production-sharing contracts, enhances economic analysis's quality and value.

Enhance your understanding of the fascinating world of the petroleum industry with our basic petroleum technology course, designed to provide a comprehensive introduction to the core aspects and technologies utilized within the sector. Learn about the pivotal role technology plays in the extraction and refinement of oil and gas and gain insights into the technical and economic frameworks that drive petroleum engineering technology.

Targeted Groups:

The basic petroleum technology course is for non-petroleum professionals, secretarial, administrative, management, field support, accounting, purchasing, economics, legal, finance, human resources, drafting, land, and data processing personnel, and those interested in obtaining a general understanding of the petroleum industry.

Prerequisite:

The basic petroleum technology course will include many exercises to enhance participants' capability to conduct various petroleum problems. Some short films will be presented to improve the participants' knowledge of petroleum operations. Additionally, the seminar assumes no or limited prior knowledge of the topics covered in the course.

Course Objectives:

At the end of this basic petroleum technology course, the participants will be able to:

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- Familiarize the participants with global oil and gas-related statistics, such as reserves, production, consumption, and exports.
- Familiarize the participants with upstream, midstream, and downstream operations and related facilities.
- Overview of the typical oil and gas operations facilities from the wellhead, flow lines, separators, tanks, pumps and compressors, pipelines, gas treatment and processing, refinery operations, etc.
- Familiarize the participants with various methods and techniques for exploring, drilling, producing, treating, and transporting oil, gas, and their products.
- Understand the basic concept regarding evaluating oil and gas reserves, artificial lift, and enhancing recovery.
- Understand the challenges associated with this industry, such as offshore operations, horizontal drilling, and other safety concerns.
- Get a general feel for petroleum economics and risk analysis.

Targeted competencies:

By the end of this basic petroleum technology training, the target competencies will be able to:

- Petroleum Formation and Exploration.
- Drilling Techniques and Equipment.
- Production and Recovery Methods.
- Gas and Oil Well Completion and Stimulation.
- Petroleum Refining and Processing.
- Health, Safety, and Environment.
- Petroleum Economics and Market.
- Petroleum Engineering Principles.
- Digital Technology in Operations.
- Industry Regulations and Standards.

Course Content:

Unit 1: Introduction to Petroleum Technologies:

- Energy Types.
- Global Statistics.
- Oil and Gas Reserves, Production, Export, and Consumption.
- The Need for Oil and Gas.
- The Upstream Operations.
- Origin of Oil and Gas.
- Reservoir types.
- Explore for Oil and Gas.
- Seismic Technology.

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Unit 2: Exploring Petroleum Engineering Technology:

- Drill an exploration well.
- Directional Drilling.
- Offshore Drilling.
- Oil and Gas Well Testing and Completion.
- Oil and Gas Well Stimulation and Workover.
- Rock and Fluid Properties.

Unit 3: Advancing Technology in the Petroleum Industry:

- Oil and Gas Production.
- Artificial Lift Methods.
- Recovery Mechanisms.
- Reservoir Simulation.
- Pressure Maintenance.
- Enhanced Oil Recovery.
- Surface Facilities.

Unit 4: Downstream Operations and Technologies:

- The Downstream Operations.
- Oil Storage and Transportation.
- Gas Treatment and Processing.
- Refinery Operations and Products.
- Petrochemical Industry.

Unit 5: Embracing Technology and Sustainability in Petroleum Technologies:

- The Role of Technology.
- Health, Safety and Environment.
- Corrosion Protection.

Conclusion:

Upon completing this basic petroleum technology course, participants can also obtain a Petroleum Technology Certificate, showcasing their knowledge and commitment to understanding the industry's basic concepts and advanced technologies.

Whether you focus on understanding petroleum technology and petroleum engineering technology or honing your skills in basic petroleum practices, this course is a solid foundation for a career associated with the many facets of petroleum technologies.