

€ TRAINING

Petroleum Industry





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Introduction:

This training program offers comprehensive education and practical skills development for individuals seeking to enter or advance within the oil and gas sector. Through theoretical instruction attendees are equipped with the knowledge and expertise needed to contribute effectively to various aspects of the petroleum industry.

Program Objectives:

At the end of this program, 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.

Targeted Audience:

- Technologists.
- Mechanical engineers.
- Safety and Inspection engineers.
- Operations, Maintenance, or project engineers.

Program Outlines:

Unit 1:

Origins of Petroleum:

- Origins of oil & gas.
- Petroleum chemistry.
- Petroleum geology.
- Exploration & production of petroleum.

- Types of Well.
- Development of Oil and gas field.

Unit 2:

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.

Unit 3:

Refinery Operations:

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

Unit 4:

Gas Processing:

- Inlet separation, Dehydration/Dewpoint control.
- Contaminants & Pipeline Gas specifications.
- Amine Gas Sweetening.
- Physical Solvent Processes.
- Sulfur Recovery.
- Gas compression & Liquefaction.

Unit 5:

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.