

Petroleum Industry From Upstream to Downstream





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REF: E1279 DATE: 9 - 13 September 2024 Venue: London (UK) - Landmark Office Space Fee: 6375 Euro

#### Introduction:

This training program provides comprehensive insights into the various stages of petroleum production, refining, and distribution. Participants gain a holistic understanding of upstream exploration and production techniques, midstream transportation and storage, as well as downstream refining and marketing processes.

# **Program Objectives:**

### At the end of this program, the 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 fields.

#### 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.
- Course Exercises, Evaluation, and roundup.