International Oil and Gas Business Management Training

Description

Introduction

Oil and gas are considered among the world's most important resources. The oil and gas industry plays a critical role in driving the global economy. Petroleum itself is used for numerous products, in addition to serving as the world's primary fuel source.

The processes and systems involved in producing and distributing oil and gas are highly complex, capital-intensive and require state-of-the-art technology.

Crude oil is almost never used as produced. It is refined to make "white" products-liquefied petroleum gas (cooking gas), gasoline, kerosene, diesel and residual fuel oil. Worldwide, demand for white products is growing much more rapidly than that for residual fuel oil (used to generate electricity or heat).

As the oil industry faces challenges related to climate change, alternative energies, energy substitutions and adverse changes in the quality of available downstream feedstocks, it recognizes the need for managers who have a comprehensive and broad understanding of the industry, including economics, evaluation and decision-making skills and who understand the issues that face the oil and gas industries in the future.

This course will provide a basis for functional managers and those whose experience has been limited to a particular area of the industry, to prepare for additional responsibilities by providing a broad base of knowledge covering the total spectrum of the oil and gas business and specific skills related to the evaluation of opportunities and enhanced decision-making.

Objectives

- Understand all of the value-added steps from the well to the consumer
- Gain an understanding of the ways the oil and gas industries have organized to operate effectively and efficiently
- Learn the details of gas processing

- Learn how crude oil is processed into transportation fuels
- Understand the fundamental economic calculus of both the upstream and downstream oil and gas industries
- Develop the skills necessary to evaluate opportunities and make effective decisions related to oil and gas operations

Content

5. **Sources, Origin and Nature of Petroleum**

- Fundamentals of organic chemistry
- Definition of Petroleum
- The Oil and Gas Industry
- Basic petroleum geology
- Origins of Hydrocarbon Deposits
- Exploration activities
- Exploration Methods
- Drilling Proposal
- Types of Well

Sources, Origin and Nature of Petroleum (Contd.)

- Oil and gas field development
- Production
- Well fluids and surface production operations
- Transportation

Oil Companies, Corporate Relationships and Structures

- Operating companies and service companies
- Local, national and multi-national oil and gas companies
- Major International Oil Companies
- National Oil and Gas Companies
- Integrated and non-integrated companies
- Integrated Companies
- Non-integrated Companies

Oil Companies, Corporate Relationships and Structures (Contd.)

- Organization of Petroleum Exporting Companies (OPEC)
- Other international and multi-national organizations
- International Energy Agency (IEA)
- Production sharing agreements

Processing Operations and Economics

- Oil refining operations
- Distillation

- Product improvement processes
- Product conversion processes
- Other operations

Processing Operations and Economics (Contd.)

- Gas processing operations
- Inlet separation
- Sulfur removal and sulfur recovery
- Dehydration
- Dewpoint control and byproduct recovery
- Gas compression
- Basic economics of the oil and gas industries

Evaluation of Oil and Gas Opportunities

- Estimating the cost of oil and gas facilities
- Using historical costs
- Cost curves
- Adjusting for different sizes
- Adjusting for different time periods

Evaluation of Oil and Gas Opportunities (Contd.)

- Building cash flow models
- What is financial modeling?
- Who does Financial Modeling?
- What are the steps in building a financial model?
- Using cash flow models to evaluate projects
- Internal rate of return
- Net present value
- Benchmark indicators

Making Decisions under Conditions of Certainty and Uncertainty

- Certainty
- Risk
- Crisis problem
- Uncertainty
- The role of probability in decisions
- Mathematical modeling of business processes

Making Decisions under Conditions of Certainty and Uncertainty (Contd.)

- Making management decisions under conditions of certainty
- Optimization of the model and interpretation of results
- Making management decisions under conditions of uncertainty