

Oil and Gas Upstream Construction Techniques





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Introduction:

This training program focuses on imparting knowledge and skills related to the construction technology and work methods employed in upstream oil and gas projects. It equips participants with the essential expertise required to effectively manage and execute construction activities in the upstream sector of the oil and gas industry.

Program Objectives:

At the end of this program, participants will be able to:

- Appreciate the important industry issues and effective strategies for addressing them, including geopolitical considerations.
- Gain a comprehensive understanding of the companies comprising the petroleum industry and their roles.
- Acquire specific skills in budgeting, finance, and strategic planning, assessing the commercial viability of Oil & Gas Projects.
- Understand resource allocation management, encompassing finances, time, personnel, and technology.
- Develop proficiency in utilizing derivative markets for risk management in the oil and gas sector.
- Compare and comprehend various international fiscal systems relevant to the industry.
- Explain the fundamentals of Oil & Gas Projects and Project Management, enhancing operational effectiveness in the competitive business environment.

Targeted Audience:

- Business Development Professionals.
- Corporate Planners, Investment Analysts, Oil & Gas Directors.
- · More senior Oil & Gas executives.
- Managers in the Oil & Gas energy sector.
- Managers in industries and professions supplying or serving the industry who would like a deeper understanding of oil and gas, e.g. bankers, lawyers, analysts, service majors.
- Project managers, Engineers, Supply Planners & Scheduling Professional.

Program Outlines:



Unit 1:

The Oil & Gas Industry - Synopsis:

- Petroleum Formation and the Chemical Nature of Petroleum.
- Global Petroleum Reserves, Supply, and Demand.
- The Global Energy Mix.
- Natural Gas and Petroleum Product, Specifications.
- Oil and Gas Exploration and Production.
- The Shale Oil & Gas Revolution & New Processes MWD & LWD.
- Adding Value: Petroleum Refining & Natural Gas Processing.

Unit 2:

The Oil & Gas Supply Chain:

- Field Development & Reservoir Management.
- Oil and Gas Supply Chain Management SCM.
- The Role of Major Network Design Decisions in a Supply Chain.
- Current Issues in the Oil & Gas Industry SCM.
- Modes of Transportation Logistics and their Performance Trends.
- The Monetization of Natural Gas LNG, CNG, GTS, GTL, GTP, GTC.
- Sales and Marketing of Petroleum Products.

Unit 3:

Project Finance and Economics:

- Economics of Oil & Gas Projects.
- Energy Commodities and Markets.
- Energy Investment & Profitability Studies.
- Project Selection Criteria and Key Performance Indicators.
- Oil & Gas Energy Project Sensitivity Analysis.



- Financial Performance Management in the Oil Industry.
- Derivatives, Energy Commodities, and Markets.

Unit 4:

Oil & Gas Energy Industry Strategic Analysis:

- Strategic Interests and Competitive Advantage of IOCIs & NOCIs.
- Strategic Value Analysis for Competitive Advantage.
- Strategic Challenges in the Oil & Gas Industry.
- Fiscal Regimes for the Oil & Gas Industries.
- Project Evaluation from a Strategic Perspective.
- Oil & Gas Energy Risks and Opportunities.
- Crude Oil Pricing Strategies.

Unit 5:

Oil & Gas Industry Future Prospects:

- Oil & Gas Industry Future Prospects.
- OPEC & IEA.
- Evaluating the Commercial Viability of Future Energy Projects.
- Geopolitics and World Oil & Gas Energy Markets.
- The Peak Oil Debate and its Consequences.
- Energy Risk Management, Uncertainty and Investment Decisions.