

Midstream Oil and Gas Fundamentals





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Introduction:

This training program provides participants with comprehensive knowledge of the midstream sector's critical aspects, covering gathering, processing, transportation, storage, and marketing within the oil and gas industry. It equips participants with the skills to navigate midstream business intricacies effectively.

Program Objectives:

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

- Explore midstream assets and the core functions of the midstream business.
- Identify the operations involved in midstream gathering and processing.
- Describe pipeline infrastructure, control measures, and safety protocols.
- Apply knowledge of storage and transportation processes within the oil and gas industry.
- Develop skills in marketing and trading strategies within the oil and gas sector.

Targeted Audience:

- Midstream Operations Managers.
- Engineers working in pipeline, storage, and transportation sectors.
- · Supply Chain Managers in the oil and gas industry.
- Financial Managers and Contract Managers in midstream operations.
- Marketing Professionals focusing on energy and commodities.
- Team Leaders and Supervisors in oil and gas midstream projects.

Program Outline:

Unit 1:

Midstream Overview:

- Definition and importance of the midstream sector in the oil and gas industry.
- Understanding midstream assets and product flow.



- Key characteristics of the midstream business.
- The market environment and dynamics influencing the midstream sector.
- Components of the midstream business and their roles in the value chain.

Unit 2:

Midstream Facilities:

- Crude oil gathering: processes and infrastructure.
- Natural gas gathering systems and their operation.
- Gas plants: functions and significance in midstream operations.
- Gas processing techniques and their role in the industry.
- Understanding sales gas specifications and regulatory requirements.

Unit 3:

Pipeline Infrastructure:

- Overview of pipeline systems and their importance in transportation.
- Types of pipeline terminals and their operational processes.
- Gas pipeline infrastructure: key components and design considerations.
- Liquid pipelines and their function in the midstream sector.
- Pipeline management, control systems, and maintenance practices.

Unit 4:

Storage and Transportation:

- Oil storage facilities: types, operations, and safety considerations.
- Natural gas storage systems and their operational challenges.
- Pipeline transportation: systems, safety, and logistics.
- Rail transport for oil and gas: advantages and limitations.
- Marine transport: its role in global distribution and logistics.



Unit 5:

Marketing and Trading:

- Marketing strategies for crude oil and natural gas.
- Trading mechanisms in oil and gas markets.
- Liquefied Natural Gas LNG: operations, marketing, and global trade.
- Master Limited Partnership MLP: evolution and impact on midstream business.
- Trends and forecasts: the future of the midstream sector.