

Course Outline: Introduction to Oil & Gas

Course Description:

This course provides newcomers with a comprehensive introduction to the oil and gas industry, covering the entire process from hydrocarbon formation to decommissioning. Participants will explore key concepts, safety practices, and technical processes involved in exploration, drilling, production, and transportation. Additionally, the course offers a broad overview of the industry's functionality, highlights the challenges associated with oil and gas production, and outlines the various job roles that contribute to its operations.

Course Details

Guided Learning Hours: 6 hours

Pre-requisites:

There are no academic qualifications, skills or experience pre-requisites for entry to the Introduction to Oil and Gas Industry course.

Minimum Learners per Class: 5

Maximum Learners per Class: 16

Learning Outcomes/ Key Topics:

- Characteristics of Oil and Gas
- Exploration, Surveys and Drilling Rights
- Drilling Rigs and Drilling a Well
- Exploration and Development Drilling
- Production and Work-over
- Oil and Gas Transportation and Decommissioning

Introduction to Oil and Gas

Appendix A: Overview of Modules

- The characteristics of oil and gas
- Exploration Survey & drilling rights
- Drilling rigs and drilling a well
- Exploration and development drilling
- Production and workover
- Oil & gas transportation and decommissioning

Module 1: Characteristics of Oil and Gas

Key Topics:

- Characteristics of Crude Oil
- Oil & Gas Formation.
- Rock and Reservoirs
- Oil and Gas Reserves
- Uses of Oil and Gas

Module 2: Exploration, Surveys, and Drilling Rights

Key Topics:

- Exploration Mapping
- Surveying
- Licensing

Module 3: Drilling Rigs and Drilling a Well

Key Topics:

- Types of Drilling Rigs
- Drilling Deck and Drilling Shack
- Key Roles in Drilling
- Process of Drilling a Well

Module 4: Exploration and Development Drilling

Key Topics:

- Drilling Equipment Used
- Field Development
- Horizontal Drilling
- Well Perforation

Module 5: Production and Workover

Key Topics:

- Production and Process Equipment
- Workover Operations
- Inspection, Repair, and Maintenance
- Legislation, Requirements, and Health & Safety

Module 6: Oil and Gas Transportation

Key Topics:

- Pipeline Management
- Transporting Oil and Gas
- Decommissioning