



Oil and Gas Essentials Training Course





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Introduction:

The global oil and gas industry is a vital part of the world's essential business sectors. Its complex life cycle encompasses exploration, production, refining, and distribution. This oil and gas production operator course aims to provide foundational knowledge in oil and gas operations training, covering the entire span from oil and gas production to decommissioning.

Participants in this oil and gas production operator training will gain insights into the industry's transformative challenges, including international pricing competition, the management of aging asset infrastructure, and the imperative of conducting safe and environmentally responsible operations.

Furthermore, as the aging workforce transitions out of the industry, this oil and gas production operator course prepares the next generation of oil and gas operators to uphold the legacy of expertise and drive the industry forward.

Targeted Groups:

This oil and gas production operator course is ideal for anyone seeking to deepen their understanding of the oil and gas industry, including newcomers, contractors working with clients in the sector, or professionals in non-technical roles aiming to comprehend the intricacies of oil and gas operations and safety measures.

Course Objectives:

Upon completing this oil and gas production operator program, participants will be able to:

- Identify the stages of the oil and gas industry life cycle, from upstream exploration to downstream sales, and the function of midstream logistics in connecting these stages.
- Understand the geological formation of oil and gas and the exploration, extraction, refining, and distribution process.
- Familiarize themselves with the terminology specific to oil and gas operations, including the components and support required for both onshore and offshore production facilities.
- Appreciate the complex challenges associated with oil and gas production operator training and recognize the innovative systems used to monitor and control operations.
- Recognize why the oil and gas industry is considered high-risk and safety-critical and the significance of oil and gas industry safety training in maintaining operational integrity and environmental compliance.



Targeted Competencies:

Participants in this oil and gas production operator course will develop competencies in:

- Principles of Oil Production.
- Onshore and Offshore Operations.
- Oil and Gas Industry Operations.
- Safety Measures and Protocols in the Oil and Gas Industry.

Course Content:

Unit 1: Introduction to Oil and Gas and The Industry:

- History and development of the oil and gas industry.
- Exploring the scope and scale of onshore and offshore operations.
- Studying the global energy market, including demand, supply, and pricing implications.
- Characteristics of oil and gas.
- Understanding the chemical and physical characteristics of hydrocarbon compounds.
- The geological origins of oil and gas.
- Oil and gas subterranean migration.
- Accumulation process of oil and gas.
- Traps.

Unit 2: Upstream Production and Equipment:

- Diving into the production processes for oil and gas, both onshore and offshore.
- Examining the specialized equipment necessary for efficient production and its varying applications in different operational environments.

Unit 3: Risks and Upstream Exploration Activities:

- Health, safety, and environmental considerations in oil and gas safety training.
- Security.
- Emphasize quality management.
- Environmental management.
- Risk management in day-to-day operations.
- Exploration surveys.
- Obtaining drilling rights.

Unit 4: Oil and Gas Drilling:

- Drilling rigs.
- Bottom-supported units.
- Floating units.
- Land-based units.
- Drilling a well.
- Bits and drilling fluid.
- Circulating system.
- Rotating systems.
- Power system.
- Hoisting system.
- Drilling personnel.
- Selecting a rig.
- Drilling from bottom-supported units.
- Drilling from floating units.
- Formation valuation.
- Well, abandonment.
- Completion.
- Drilling platforms and land-based units.
- Mobile offshore drilling units.
- Directional and horizontal drilling.
- Well completion.

Unit 5: Midstream, Downstream, and Decommissioning:

- Processing requirements.
- Storage and its importance.
- Fuel transportation.
- Refinery.
- Unconventional explanations.
- Decommissioning.

Conclusion:

After this oil and gas production operator course, participants will receive an oil and gas certificate acknowledging their enhanced understanding and capabilities in oil and gas production and operations.