

Training Course on Certificate in Global Upstream Oil and Gas Operations

Professional Development Training Course Outline

Category	Oil and Gas	Duration	5 Days
Base Fee	\$1,500 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

The global upstream oil and gas sector is a dynamic and technologically advanced industry, demanding a highly skilled workforce equipped with specialized knowledge. This **Certificate in Global Upstream Oil & Gas Operations** provides a comprehensive introduction to the critical processes and technologies involved in the exploration, drilling, and production of crude oil and natural gas. Participants will gain a foundational understanding of petroleum geology, reservoir engineering, drilling operations, production techniques, and the crucial aspects of health, safety, and environmental (HSE) management within the industry. This intensive training equips individuals with the essential skills and knowledge to contribute effectively to upstream operations and pursue rewarding careers in this vital global sector. The curriculum emphasizes practical application and industry best practices, ensuring graduates are well-prepared for the challenges and opportunities within the **upstream oil and gas value chain**.

Training Course on Certificate in Global Upstream Oil & Gas Operations is meticulously designed to address the growing demand for qualified professionals in the global energy landscape. By focusing on key operational areas and integrating the latest industry trends, the course provides a robust foundation for career advancement. Through a blend of theoretical learning, practical exercises, and real-world **case studies**, participants will develop a strong understanding of the complexities and nuances of **oil and gas exploration and production**. The program fosters critical thinking, problem-solving skills, and a deep appreciation for safety and sustainability, making graduates valuable assets to organizations operating in the **international oil and gas market**.

Programme Curriculum

Training Course on Certificate in Global Upstream Oil & Gas Operations

Introduction

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Course Duration

5 days

Course Objectives

This training course aims to equip participants with the following key skills and knowledge:

1. Understand the fundamental principles of **petroleum geology** and the formation of hydrocarbon reservoirs.
2. Explain the various techniques involved in **seismic exploration** and subsurface evaluation.
3. Describe the different types of **drilling rigs** and their associated equipment and operations.
4. Identify the key stages of the **well completion** process and the technologies involved.
5. Analyze the principles of **reservoir engineering** and methods for estimating hydrocarbon reserves.
6. Explain the primary and enhanced **oil recovery techniques** used in production operations.
7. Understand the processes involved in **natural gas processing** and transportation.
8. Describe the importance of **health, safety, and environmental (HSE)** regulations and practices in upstream operations.
9. Identify potential **environmental impacts** of upstream activities and mitigation strategies.
10. Understand the fundamentals of **project management** in the context of oil and gas development.
11. Analyze the **economic and commercial aspects** of upstream oil and gas projects.
12. Explain the role of **digital technologies** and automation in modern upstream operations.
13. Develop an understanding of the **global oil and gas industry trends** and future outlook.

Organizational Benefits

- Equipping personnel with the necessary knowledge and skills to perform their roles effectively and efficiently.
- A well-trained workforce contributes to smoother operations and reduced downtime.

- Comprehensive HSE training fosters a safety-conscious culture and minimizes workplace accidents.
- Employees with a strong understanding of upstream operations can contribute to more informed decisions.
- Skilled personnel can handle tasks more effectively, leading to higher overall productivity.
- The course content aligns with recognized industry best practices and regulatory requirements.
- Investing in employee development demonstrates commitment and enhances employee satisfaction.
- Understanding new technologies enables organizations to stay competitive.

Target Audience:

1. Entry-level professionals seeking to begin a career in the upstream oil and gas industry.
2. Technicians and operators working in drilling, production, and maintenance roles.
3. Engineers from other disciplines transitioning into the oil and gas sector.
4. Geologists and geophysicists looking to broaden their operational understanding.
5. Managers and supervisors seeking a comprehensive overview of upstream activities.
6. Professionals in finance, legal, and business development roles within oil and gas companies.
7. Government and regulatory personnel involved in the oil and gas sector.
8. Individuals seeking a career change and interested in the energy industry.

Course Outline

Module 1: Introduction to the Global Oil & Gas Industry

- Overview of the energy landscape and the role of oil and gas.
- The upstream, midstream, and downstream sectors explained.
- Key players and organizations in the global oil and gas industry.
- Basic principles of supply and demand and market dynamics.
- **Case Study:** Analysis of the impact of a major geopolitical event on global oil prices.

Module 2: Petroleum Geology and Geophysics

- Formation of hydrocarbons and the geological conditions for accumulation.
- Types of sedimentary basins and their petroleum potential.
- Introduction to seismic data acquisition, processing, and interpretation.
- Well logging techniques and subsurface formation evaluation.
- **Case Study:** Interpretation of seismic data to identify potential hydrocarbon traps.

Module 3: Drilling Operations and Technology

- Types of drilling rigs (onshore and offshore) and their components.
- The drilling process: from spudding to total depth.
- Drilling fluids, well control, and cementing operations.
- Advanced drilling technologies: directional drilling and horizontal wells.
- **Case Study:** Analysis of a challenging deepwater drilling operation.

Module 4: Well Completion and Intervention

- Principles of well completion: ensuring safe and efficient production.
- Types of well completions: open hole, cased hole, and intelligent wells.
- Well intervention techniques: workovers and artificial lift methods.

- Subsea well completion and intervention technologies.
- **Case Study:** Evaluation of different completion strategies for maximizing well productivity.

Module 5: Reservoir Engineering and Management

- Fundamental rock and fluid properties of hydrocarbon reservoirs.
- Estimating oil and gas reserves: volumetric and material balance methods.
- Principles of fluid flow in porous media and well testing.
- Reservoir simulation and production forecasting techniques.
- **Case Study:** Development of a reservoir management plan for a mature oil field.

Module 6: Oil and Gas Production Operations

- Surface production facilities: separation, processing, and storage.
- Artificial lift methods: pumps, gas lift, and other techniques.
- Produced water management and disposal.
- Crude oil and natural gas transportation and storage.
- **Case Study:** Optimization of production processes in a large offshore platform.

Module 7: Health, Safety, and Environmental (HSE) Management

- Key HSE regulations and standards in the oil and gas industry.
- Risk assessment and management in upstream operations.
- Emergency response and crisis management procedures.
- Environmental impact assessment and mitigation strategies.
- **Case Study:** Analysis of a major safety incident and lessons learned in the oil and gas sector.

Module 8: Project Economics and Management in Upstream Operations

- Economic evaluation of oil and gas projects: profitability indicators.
- Project planning, scheduling, and cost control.
- Risk and uncertainty analysis in investment decisions.
- Contracting and procurement strategies in the oil and gas industry.
- **Case Study:** Economic feasibility analysis of a new offshore development project.

Training Methodology

This training course will employ a blended learning approach, incorporating:

- Interactive lectures and presentations by industry experts.
- Practical exercises and simulations to reinforce learning.
- Group discussions and knowledge-sharing sessions.
- Analysis of real-world case studies and scenarios.
- Multimedia resources, including videos and interactive tools.
- Opportunities for networking and peer learning.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

- a.** The participant must be conversant with English.
- b.** Upon completion of training the participant will be issued with an Authorized Training Certificate
- c.** Course duration is flexible and the contents can be modified to fit any number of days.
- d.** The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- e.** One-year post-training support Consultation and Coaching provided after the course.
- f.** Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

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Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com