London TDM

Oil and Gas Industry Training Courses

Course Venue: United Kingdom - London

Course Date: From 26 July 2026 To 30 July 2026

Course Place: London Paddington

Course Fees: 7,500 USD

Introduction

The "Drilling Engineering and Well Operations" professional course is designed to provide participants with an in-depth understanding of the principles, techniques, and practices involved in drilling engineering and well operations. Throughout this 5-day course, attendees will gain practical insights and hands-on experience to enhance their skills in the design, planning, and execution of drilling projects.

Objectives

- Understand the fundamental concepts of drilling engineering and its role in the oil and gas industry.
- Learn the techniques and technologies used in modern drilling operations.
- Develop skills to design and plan efficient drilling projects.
- Gain insights into wellbore stability, drilling fluids, and equipment selection.
- Explore best practices for safety and environmental management in drilling operations.

Course Outlines

Day 1: Introduction to Drilling Engineering

- Overview of the oil and gas industry and the role of drilling engineering
- Key components of the drilling process
- Introduction to drilling equipment and technologies
- Basic geology and its impact on drilling
- Regulations and compliance in drilling operations

Day 2: Well Planning and Design

- Objectives and stages of well planning
- Casing design and setting depth considerations
- Selection of drilling fluids: types and functions
- Directional drilling and trajectory planning
- Bit selection and optimization

Day 3: Drilling Operations and Practices

- Drilling rig components and functions
- Drilling techniques and methods
- Wellbore stability and control methods
- Data acquisition and monitoring during drilling
- Troubleshooting common drilling problems

Day 4: Advanced Topics in Drilling Engineering

- Offshore drilling: challenges and solutions
- Enhanced recovery techniques
- Risk assessment and management in drilling projects
- Advancements in drilling technologies

- Case studies of major drilling projects

Day 5: Safety, Environment, and Best Practices

- Health, safety, and environment (HSE) in drilling operations
- Environmental impact and mitigation strategies
- Emergency response planning and preparedness
- Drilling waste management practices
- Overview of industry standards and best practices