

Training Title

DIRECTIONAL DRILLER: WELL TRAJECTORY & BIT OPTIMIZATION TECHNIQUES

Training Duration

5 days

Training Venue and Dates

Directional Driller: Well Trajectory & Bit Optimization Techniques	5	06th to 10th October 2025	\$5,500	Dubai, UAE.
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Trainings will be conducted in any of the 4 or 5 star hotels.

Training Fees

- *5,500 US\$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Lunch.*

Training Certificate

Prolific Consultants FZE Certificate of Course Completion will be issued to all attendees.

COURSE OVERVIEW

COURSE DESCRIPTION

This course will deliver a comprehensive understanding of modern directional drilling techniques and the industry standards used in well placement.

The evolution of directional drilling tools and techniques that are used to achieve high accuracy well positioning are detailed with reference to the fundamental engineering that underlies the equipment we work with, and the procedures and practices we work to.

This is very much an operationally focused course which looks to deliver a detailed understanding of not just the narrow field of the Directional Driller's work, but all the associated areas of risk that can result from the practices, tools and techniques that they may use.

The knowledge from this course can be directly applied to ongoing drilling operations or future well planning and will have a dramatic impact on drilling performance.

All the topics are placed in their operational context and an understanding of how each topic is interrelated with the other subject areas in the course is developed throughout the week. Throughout the course areas in which directional drilling can adversely impact the well cost or increase the well risk are detailed and the mitigations for these risks are discussed.

This course offers an in-depth exploration of the fundamentals of directional drilling, crucial for optimizing well placement and maximizing resource extraction within the oil and gas industry. Participants will gain insights into the planning, execution, and technologies involved in directional drilling operations.

COURSE OBJECTIVES:

- *Understand the principles and significance of directional drilling.*
- *Explore the tools and technologies used in directional drilling operations.*
- *Develop skills for planning and executing directional drilling projects.*
- *Analyze and solve common challenges associated with directional drilling.*
- *Enhance decision-making processes with practical case studies and simulations.*

SUITABLE FOR:

- ✓ *Drilling Engineers*
- ✓ *Well Planners*
- ✓ *Directional Drillers*
- ✓ *Geologists*
- ✓ *Reservoir Engineers*
- ✓ *Project Managers in Drilling Operations*

TRAINING METHODOLOGY:

A highly interactive combination of lectures and discussion sessions will be managed to maximize the amount and quality of information and knowledge transfer. The sessions will start by raising the most relevant questions, and motivate everybody find the right answers. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course. Very useful Course Materials will be given.

COURSE OUTLINE :-

Day 1:

Introduction to Directional Drilling

- *Overview of Directional Drilling and Its Importance*
- *Key Terminologies and Concepts in Directional Drilling*
- *Historical Development and Evolution of Techniques*
- *Applications and Benefits of Directional Drilling in Oil and Gas*

Day 2:

Tools and Technologies in Directional Drilling

- *Overview of Directional Drilling Equipment*
- *Measurement While Drilling (MWD) and Logging While Drilling (LWD)*
- *Rotary Steerable Systems (RSS)*

- *Geosteering and Its Role in Directional Drilling*
- *Advances in Drill Bit Technologies*

Day 3:

Planning and Design of Directional Wells

- *Well Trajectory Planning and Design Considerations*
- *Calculating Well Path and Trajectory Types*
- *Build and Drop, Horizontal, and Multilateral Wells*
- *Case Studies: Successful Well Path Designs and Implementation*

Day 4:

Operational Techniques and Challenges

- *Drilling Fluids Management and Hydraulics in Directional Drilling*
- *Techniques for Maintaining Wellbore Stability*
- *Common Challenges and Solutions in Directional Drilling*
- *Managing Doglegs, Torque, and Drag Issues*

Day 5:

Practical Application and Case Studies

- *Hands-on Simulations: Planning and Executing Directional Drilling*
- *Analyzing Real-World Case Studies*
- *Lessons Learned from Past Projects*
- *Best Practices and Future Trends in Directional Drilling*
- *Final Q&A: Troubleshooting Challenges and Sharing Experiences.*

Case Studies, Last Day Review, Discussions & Pre & Post Assessments will be carried out.

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