Email: info@gatewayconsulting.com | Phone: +96522968641
https://gatewayconsulting.com

ADVANCED DRILLING BEST PRACTICES

Start Date:	19/04/2026	**End Date:**	23/04/2026
Categories:	Oil & Gas	**Venues:**	Dubai
Formats:	In Person	**Instructors:**	

OVERVIEW

This intensive program covers the latest advancements and best practices in drilling engineering and operations. Participants will gain in-depth knowledge of modern drilling technologies, performance optimization strategies, and risk mitigation methodologies essential for executing complex drilling projects efficiently and safely across diverse geological settings.

OBJECTIVES

By the end of this course, participants will be able to: – Deepen technical expertise in advanced drilling methods, including extended-reach and HPHT wells. – Evaluate and apply cutting-edge drilling technologies such as rotary steerable systems and managed pressure drilling (MPD). – Develop comprehensive risk management plans for complex drilling environments. – Implement techniques to maximize drilling performance and reduce non-productive time (NPT). – Strengthen problem-solving skills through the analysis of real-world drilling failures and troubleshooting strategies.

COURSE OUTLINE

1- Fundamentals and Trends in Advanced Drilling Practices 2- Innovative Technologies and Equipment in Drilling Operations 3- Risk Identification, Assessment, and Management in Well Construction 4- Performance Monitoring, Optimization, and Benchmarking Tools 5- Real-World Case Studies: Lessons Learned and Troubleshooting Techniques

TARGET AUDIENCE

All Supervisory Levels, Drilling Engineers, Well Engineers, Drilling Supervisors, Drilling Superintendents, Operations Managers, Technical Consultants, and Petroleum Engineers involved in high-complexity drilling projects.

METHODOLOGY

Drilling Engineers, Well Engineers, Drilling Supervisors, Drilling Superintendents, Operations Managers, Technical Consultants, and Petroleum Engineers involved in high-complexity drilling projects.

CONCLUSION

Upon completion of the course, participants will have the capability to design, plan, and execute drilling programs with a higher degree of efficiency and technical precision. They will be equipped to apply best practices to reduce drilling risks, optimize operational outcomes, and handle complex well conditions confidently.

DAILY AGENDA

Day 1: Foundations of Advanced Drilling Practices

Introduce participants to advanced drilling methodologies, review critical challenges in modern drilling environments, and discuss the evolution and future trends of drilling technology and techniques.

Day 2: Innovative Drilling Technologies and Tools

Detailed examination of advanced equipment and technologies such as rotary steerable systems, MPD applications, automated rig systems, and innovations in bottom-hole assembly (BHA) design.

Day 3: Risk Management and Complex Well Design

Focus on comprehensive risk management frameworks, well control principles, wellbore integrity management, and contingency planning for deepwater, HPHT, and extended-reach drilling (ERD) projects.

Day 4: Performance Optimization and Drilling Efficiency

Techniques for analyzing key performance indicators (KPIs), utilizing real-time drilling data for performance improvement, reducing invisible lost time (ILT), and implementing continuous improvement strategies.

Day 5: Case Studies and Problem-Solving in Drilling Operations

Hands-on group exercises based on real-world drilling failures, troubleshooting stuck pipe, lost circulation, and wellbore instability issues, applying technical reasoning to develop effective remediation strategies.

For more information, please contact us:
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