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PRODUCTION OPTIMIZATION ENGINEER: EFFICIENCY ENHANCEMENT & TROUBLESHOOTING

Start Date:	26/10/2025	**End Date:**	30/10/2025
Categories:	Oil & Gas	**Venues:**	Cairo
Formats:	In Person	**Instructors:**	

OVERVIEW

This technical course equips participants with the skills and techniques needed to enhance production system performance and troubleshoot operational challenges. It focuses on optimizing hydrocarbon production through system analysis, debottlenecking, artificial lift optimization, and root cause troubleshooting — ensuring safe, efficient, and cost-effective production operations.

OBJECTIVES

By the end of this course, participants will be able to: – Analyze production systems to identify inefficiencies and performance bottlenecks. – Apply optimization techniques to maximize hydrocarbon recovery and production rates. – Diagnose and troubleshoot common production system failures and operational issues. – Optimize artificial lift systems, surface facilities, and flow assurance strategies. – Implement production monitoring programs and continuous improvement initiatives.

COURSE OUTLINE

1- Fundamentals of Production Optimization and System Performance 2- Identifying and Analyzing Bottlenecks in Surface and Subsurface Systems 3- Artificial Lift Optimization and Flow Assurance Techniques 4- Troubleshooting Production Issues: Root Cause Analysis and Corrective Actions 5- Production Monitoring, Surveillance, and Continuous Improvement Programs

TARGET AUDIENCE

Production Engineers, Petroleum Engineers, Well Intervention Engineers, Operations Engineers, Field Engineers, Artificial Lift Specialists, and technical professionals responsible for field operations, production optimization, or troubleshooting activities.

METHODOLOGY

The course combines technical lectures, field case study reviews, simulation exercises, production system modeling workshops, troubleshooting simulations, and group discussions to ensure participants gain both theoretical knowledge and practical skills.

CONCLUSION

Upon completing the course, participants will be capable of optimizing production systems, resolving operational challenges efficiently, improving production reliability, and contributing to enhanced field performance and operational profitability.

DAILY AGENDA

Day 1: Introduction to Production Optimization Principles

Review the fundamentals of production systems, key optimization drivers, and methods for improving field production efficiency.

Day 2: Identifying System Bottlenecks and Debottlenecking Techniques

Analyze surface and subsurface production systems to identify restrictions, inefficiencies, and opportunities for debottlenecking.

Day 3: Artificial Lift Optimization and Flow Assurance Strategies

Focus on optimizing ESPs, gas lift, rod pumps, and applying flow assurance techniques to maintain production flow.

Day 4: Troubleshooting Production Problems and Root Cause Analysis

Develop systematic troubleshooting approaches, conduct root cause analyses, and plan corrective actions for operational issues.

Day 5: Production Monitoring and Continuous Improvement

Design and implement production monitoring programs, use surveillance data for optimization, and foster a continuous improvement culture.

For more information, please contact us:
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