

Advanced ESP (Electrical Submersible Pump) Operations & Troubleshooting

COURSE OVERVIEW

This technical course provides in-depth knowledge and hands-on expertise in Electric Submersible Pump (ESP) systems, focusing on advanced operational strategies, diagnostics, and problem-solving techniques. The course covers ESP design considerations, performance optimization, failure analysis, and effective troubleshooting methodologies, equipping participants with the skills to maximize production efficiency and minimize downtime. Global case studies and practical exercises are integrated to bridge theory with field application, ensuring participants gain both technical depth and operational insight.

WHO SHOULD ATTEND?

This course is ideal for production engineers, field supervisors, ESP specialists, petroleum engineers, and technical professionals who are directly involved in the operation, monitoring, and maintenance of ESP systems. It also benefits asset managers and decision-makers who seek to enhance production performance through advanced ESP reliability and troubleshooting capabilities.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Develop a strong understanding of advanced ESP operational principles and system optimization.
- Accurately diagnose and troubleshoot complex ESP failures using structured methodologies.
- Apply predictive monitoring techniques to reduce ESP downtime and extend run life.
- Analyze real-world ESP case studies to identify root causes and implement corrective actions.
- Improve production efficiency and equipment reliability through advanced operational practices.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Comprehensive coverage of ESP design, operations, and failure mechanisms.
- Advanced troubleshooting frameworks with practical case studies.
- Hands-on exercises with ESP performance analysis tools.
- Strategies for predictive monitoring and extending ESP run life.
- Industry best practices and field-proven lessons for reliable ESP operations.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded