

Advanced Electrical Submersible Pumps (ESP)

Barcelona (Spain)

8 - 12 December 2025

UK Traininig

PARTNER



Advanced Electrical Submersible Pumps (ESP)

Code: OG28 From: 8 - 12 December 2025 City: Barcelona (Spain) Fees: 5100 Pound

Introduction

This Electric Submersible Pump ESP Training course offers an advanced understanding of electric submersible pumps ESPs, focusing on their operation, design, troubleshooting, and optimization. The training is designed to equip participants with the knowledge and skills to maximize pump performance, minimize downtime, and extend the lifespan of ESPs, particularly in challenging, high-production wells. Whether you are working with well submersible pumps or managing complex reservoir applications, this course will enhance your understanding of the core components and best practices for optimizing ESP systems.

Course Objectives

By the end of this course, participants will:

- Acquire advanced knowledge of ESP operation and the key components of electrical submersible pumps.
- Learn effective techniques for troubleshooting and resolving common ESP failures.
- Understand optimization strategies to improve ESP performance and extend the submersible pump lifespan.
- Enhance design capabilities for complex well applications and ESP installation.
- Analyze real-world case studies to reinforce learning and better understand submersible pump repair and performance optimization.

Course Outlines

Day 1: Advanced Principles of ESP Operation

- Overview of ESP components and their functions.
- Detailed explanation of ESP system operations and key performance indicators.
- Factors affecting ESP efficiency in complex reservoirs.
- Common challenges faced during ESP operation in high-production wells.
- Case studies of submersible pump utility in various scenarios.

Day 2: ESP Design for Complex Applications

- Advanced design principles for electrical submersible pumps.
- Designing ESPs for high-production and complex wells.
- Considering fluid properties during the ESP design process.
- Hands-on design exercises.
- Review of successful ESP design case studies and lessons learned.

Day 3: ESP Installation Best Practices



- Key considerations for ESP installation.
- Techniques to ensure proper system alignment and integration.
- Managing ESP installations in deep, offshore, and high-pressure wells.
- Common installation mistakes and preventive strategies.
- Real-world installation scenarios and lessons learned.

Day 4: Troubleshooting and Problem Resolution

- Diagnosing common ESP failures and their root causes.
- Troubleshooting electrical and mechanical issues in ESP systems.
- Tools and techniques for effective ESP troubleshooting.
- Preventing recurring submersible pump issues with proactive solutions.
- Interactive ESP troubleshooting exercises to enhance practical skills.

Day 5: Optimizing ESP Performance

- Monitoring ESP systems to ensure optimal performance.
- Techniques to reduce downtime and maximize operational efficiency of electrical submersible pumps.
- Strategies to extend the lifespan of ESP pumps through regular maintenance and optimization.
- Case studies on successful ESP optimizations and performance improvements.
- Final review and participant feedback session.

Why Attend This Course: Wins & Losses!

- Maximize ESP Performance: Learn how to achieve the best performance from electrical submersible pumps, including troubleshooting techniques to address failures and optimize efficiency.
- Hands-On Knowledge: Engage in ESP system design, installation best practices, and real-world troubleshooting exercises to improve your practical capabilities.
- Industry-Relevant Skills: Whether dealing with complex well applications or high-pressure environments, this course prepares you to solve submersible pump pressure and performance challenges.
- Extend Pump Lifespan: Gain strategies for reducing downtime, performing efficient repairs, and extending the lifespan of ESP pumps in demanding applications.
- Real-World Case Studies: Understand real challenges and successful implementations of ESP systems in the field, reinforcing learning with practical solutions.

Conclusion

This Electrical Submersible Pump Training course provides in-depth insights into ESP systems, from design and installation to troubleshooting and performance optimization. Whether you're new to ESP systems or looking to deepen your expertise, this program equips you with essential knowledge and practical skills to manage submersible pump utilities effectively. By the end of this training, you will be equipped to maximize the performance, efficiency, and longevity of electric submersible pumps in any challenging environment, ensuring success in complex and high-production well applications.

Blackbird Training Cities

Europe



Malaga (Spain)



Sarajevo (Bosnia and Herzegovina)



Oporto (Portugal)



Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Annecy (France)



Bordeaux (France)



Copenhagen (Denmark)



Birmingham (UK)



Lyon (France)



Moscow (Russia)



Stockholm (Sweden)



Podgorica (Montenegro)



Batumi (Georgia)



Salzburg (Austria)



Florence (Italy)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany)



Paris (France)



Athens (Greece)



Barcelona (Spain)



Munich (Germany)



Geneva (Switzerland)



Prague (Czech)



Vienna (Austria)



Rome (Italy)



Brussels (Belgium)



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Zurich (Switzerland)



Manchester (UK)



Milan (Italy)



Blackbird Training Cities

USA & Canada



Los Angeles (USA)



Orlando, Florida (USA)



Online



Phoenix, Arizona (USA)



Houston, Texas (USA)



Boston, MA (USA)



Washington (USA)



Miami, Florida (USA)



New York City (USA)



Seattle, Washington (USA)



Washington DC (USA)



In House



Jersey, New Jersey (USA)



Toronto (Canada)

ASIA



Baku (Azerbaijan)
(Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)



Bali (Indonesia)



Bangkok



Beijing (China)



Singapore (Singapore)



Sydney



Tokyo (Japan)



Jeddah (KSA)



Riyadh (KSA)



Melbourne (Australia)
(Kuwait)



Phuket (Thailand)



Shanghai (China)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City



Seoul (South Korea)



Pulau Ujong (Singapore)



Irbid (Jordan)



Jakarta (Indonesia)



Amman (Jordan)



Beirut



Blackbird Training Cities

AFRICA



Kigali (Rwanda)



Cape Town (South Africa)



Accra (Ghana)



Lagos (Nigeria)



Marrakesh (Morocco)



Nairobi (Kenya)



Zanzibar (Tanzania)



Tangier (Morocco)



Cairo (Egypt)



Sharm El-Sheikh (Egypt)



Casablanca (Morocco)



Tunis (Tunisia)



Blackbird Training Clients



MANNAI Trading
Company WLL,
Qatar



Alumina Corporation
Guinea



Booking.com
Netherlands



Oxfam GB International
Organization,
Yemen



Capital Markets
Authority,
Kuwait



Waltersmith Petroman Oil Limited
Nigeria



Qatar National Bank
(QNB),
Qatar



Qatar Foundation,
Qatar



AFRICAN UNION ADVISORY
BOARD ON CORRUPTION,
Tanzania



KFAS
Kuwait



Reserve Bank of
Malawi,
Malawi



Central Bank of Nigeria
Nigeria



Ministry of Interior,
KSA



Mabruk Oil Company
Libya



Saudi Electricity
Company,
KSA



BADAN PENGELOLA
KEUANGAN Haji,
Indonesia



NATO
Italy



ENI CORPORATE
UNIVERSITY,
Italy



Gulf Bank
Kuwait



Defence Space Administration
Nigeria



National Industries
Group (Holding),
Kuwait



Hamad Medical
Corporation,
Qatar



USAID
Pakistan



STC Solutions,
KSA



North Oil company,



EKO Electricity



Oman Broadband



UNITED NATIONS
UN.



Authority for

UK Training
PARTNER



Blackbird Training Categories

Management & Admin

Entertainment & Leisure
Professional Skills
Finance, Accounting, Budgeting
Media & Public Relations
Project Management
Human Resources
Audit & Quality Assurance
Marketing, Sales, Customer Service
Secretary & Admin
Supply Chain & Logistics
Management & Leadership
Agile and Elevation

Technical Courses

Artificial Intelligence (AI)
Hospital Management
Public Sector
Special Workshops
Oil & Gas Engineering
Telecom Engineering
IT & IT Engineering
Health & Safety
Law and Contract Management
Customs & Safety
Aviation
C-Suite Training



International House 185 Tower Bridge
Road London SE1 2UF United Kingdom



+44 7401 1773 35
+44 7480 775526



Sales@blackbird-training.com



www.blackbird-training.com

