

Course Overview:

This intermediate course is tailored for corporate maintenance and engineering professionals responsible for the operation and upkeep of battery systems. It addresses the increasing reliance on battery-powered solutions in industrial environments and the need for effective diagnostics and preventive maintenance. Participants will gain hands-on insights into troubleshooting techniques, safety practices, and the latest developments in battery technology.

Course Objective:

- Identify various battery types and understand their working principles
- Troubleshoot common battery and charger issues using diagnostic tools
- Apply preventive and routine maintenance strategies to maximize battery life
- Implement safety protocols in handling and maintaining battery systems
- Evaluate advancements and trends in battery technology and charging systems

Course Outline:

1. Introduction to Battery Technology
 - Types of batteries
 - Working principles of batteries
 - Battery applications in industry
2. Battery Charging Systems
 - Charger types and functions
 - Charging techniques
 - Monitoring and control systems
3. Troubleshooting Battery Systems
 - Common battery failures
 - Diagnostic methods
 - Troubleshooting procedures
4. Battery Maintenance Practices
 - Routine maintenance procedures
 - Performance testing
 - Longevity and efficiency improvement
5. Safety in Battery Maintenance
 - Safety precautions and procedures
 - Handling and disposal of batteries
 - Emergency response for battery incidents
6. Advanced Diagnostic Tools
 - Using multimeters and analyzers
 - Software tools for diagnostics
 - Interpreting diagnostic data
7. Preventive Maintenance Strategies
 - Developing preventive maintenance plans
 - Cost-benefit analysis
 - Lifecycle management of batteries
8. Emerging Trends in Battery Technology
 - Advancements in battery technologies

Training Language:

English/Arabic

Training Methodology:

The course combines various teaching methods, including instructor-led presentations, group discussions, case study analyses, and assessments through quizzes and a final exam to engage participants and ensure they understand and retain the material.

Venue | Date | Fees

Jubail | 02-11-2025 | 17,250 SAR

- Future of battery applications
- Innovations in charging systems

Who Should Attend:

- Maintenance technicians
- Electrical engineers
- Engineering support staff
- Professionals working with battery systems