

Course Overview:

This course equips professionals with essential knowledge and skills for managing transformer systems effectively in industrial and utility environments. By focusing on practical aspects such as selection, operation, maintenance, and fault analysis, it ensures participants can enhance system reliability, safety, and efficiency—key concerns for maintenance teams and engineering departments.

Course Objective:

- Understand core principles of transformer design and function
- Apply criteria for selecting suitable transformers for specific applications
- Conduct routine maintenance and diagnostic testing with confidence
- Identify and resolve common transformer faults using structured methodologies
- Integrate safety and efficiency practices in transformer operations

Course Outline:

1. Transformer Fundamentals
 - Types and functions
 - Design principles
 - Electrical characteristics
2. Transformer Selection Criteria
 - Capacity and efficiency
 - Application considerations
 - Standards and regulations
3. Operation of Transformers
 - Loading and performance
 - Cooling systems
 - Monitoring and control
4. Routine Maintenance and Testing
 - Inspection procedures
 - Predictive maintenance strategies
 - Testing techniques
5. Troubleshooting and Fault Analysis
 - Common faults and causes
 - Diagnostic methods
 - Corrective actions
6. Safety and Environmental Considerations
 - Safety protocols
 - Environmental impact
 - Emergency response
7. Energy Efficiency and Sustainability
 - Efficiency improvement techniques
 - Sustainable practices
 - Lifecycle management
8. Case Studies and Best Practices
 - Real-world examples
 - Lessons learned

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

Riyadh | 26-10-2025 | 17,250 SAR

-Best practice implementation

Who Should Attend:

- Electrical Engineers
- Maintenance Technicians
- Transformer Specialists
- Project Managers