

Course Overview:

In today's competitive and environmentally conscious business landscape, effective energy management is critical for operational efficiency and sustainability. This course equips mid-level professionals with practical strategies to assess and reduce energy consumption across various systems. Participants will gain hands-on understanding of energy audits, efficiency improvement methods, and renewable energy integration tailored to industrial and commercial settings.

Course Objective:

- Understand key principles and terminology related to energy management
- Learn to conduct comprehensive energy audits for facilities
- Develop strategies to enhance the efficiency of thermal and electrical systems
- Explore the application of renewable energy technologies
- Implement sustainable practices to meet environmental compliance standards

Course Outline:

1. Fundamentals of Energy Management
 - Energy concepts and terminology
 - Overview of energy systems and processes
 - Regulatory frameworks and standards
2. Energy Auditing Techniques
 - Audit planning and scope
 - Data collection methods and analysis tools
 - Reporting findings and actionable recommendations
3. Efficiency in Electrical Systems
 - Electrical load management strategies
 - Power quality issues and solutions
 - Optimizing lighting systems for efficiency
4. Thermal Systems Efficiency
 - Heating and cooling system performance
 - Boiler and furnace efficiency techniques
 - Role of insulation and ventilation in energy use
5. Renewable Energy Technologies
 - Solar power applications
 - Basics of wind energy systems
 - Bioenergy solutions and integration
6. Energy Management Systems
 - Control system implementation
 - Monitoring and targeting tools
 - Energy information management practices
7. Sustainability and Environmental Impact
 - Green building practices and certification
 - Techniques for reducing carbon footprint
 - Ensuring environmental regulatory compliance
8. Case Studies in Energy Management
 - Industrial and commercial success stories

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 | 09-11-2025 | 17,250 SAR

- Benchmarking against best practices
- Innovative approaches and future trends

Who Should Attend:

- Energy Managers
- Facility Engineers
- Maintenance Supervisors
- Environmental Officers