



London TDM

Mechanical and Electrical Engineering Training Courses

Course Venue: United Arab Emirates - Dubai

Course Date: From 18 January 2026 To 22 January 2026

Course Place: Downtown Dubai

Course Fees: 5,000 USD

Introduction

This comprehensive 5-day course aims to provide professionals with an in-depth understanding of steam boilers and thermal systems. Participants will learn about the design, operation, and maintenance of these systems, as well as safety practices and efficiency optimization. Tailored for engineers, technicians, and facility managers, the course combines theoretical knowledge with practical applications to enhance competency and confidence in managing steam and thermal systems effectively.

Objectives

- Understand the fundamental principles of steam boilers and thermal systems.
- Identify various types of boilers and their applications.
- Learn best practices for safety and maintenance procedures.
- Evaluate system performance for efficiency improvements.
- Apply knowledge to real-world scenarios in industrial settings.

Course Outlines

Day 1: Introduction to Steam Boilers

- Basic concepts and terminology
- Types of steam boilers
- Components and functions of boilers
- History and evolution of steam boilers
- Introduction to boiler codes and standards

Day 2: Design and Operation

- Boiler design principles
- Understanding boiler diagrams and schematics
- Operational processes and modifications
- Control systems and instrumentation
- Fuel types and combustion techniques

Day 3: Safety and Maintenance

- Safety regulations and compliance
- Maintenance best practices
- Troubleshooting common issues
- Emergency procedures and response
- Regular inspection requirements

Day 4: Thermal Systems and Optimization

- Introduction to thermal systems
- Integration of thermal systems with boilers
- Efficiency metrics and optimization techniques
- Energy recovery and conservation strategies

- Emerging technologies in thermal systems

Day 5: Applications and Case Studies

- Industry-specific applications
- Analysis of real-world case studies
- Impact assessment and performance evaluation
- Interactive group discussions and Q&A
- Course review and assessment