



London TDM

# Mechanical and Electrical Engineering Training Courses

**Course Venue:** United Arab Emirates - Dubai

**Course Date:** From 25 January 2026 To 29 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