



London TDM

# Engineering and Technical Skills Training Courses

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

**Course Date:** From 19 October 2025 To 23 October 2025

**Course Place:** Downtown Dubai

**Course Fees:** 5,000 USD

## Introduction

In the manufacturing and industrial sectors, preventive and predictive maintenance are critical strategies that ensure equipment reliability, efficiency, and longevity. This 5-day professional course is designed to provide participants with a comprehensive understanding and practical techniques to implement and optimize preventive and predictive maintenance practices, reducing downtime and boosting productivity.

## Objectives

- Understand the fundamental principles of preventive and predictive maintenance.
- Learn how to identify and assess critical equipment and systems.
- Gain practical skills in maintenance planning and scheduling.
- Explore the latest technologies and tools used in maintenance practices.
- Develop strategies to enhance maintenance efficiency and effectiveness.

## Course Outlines

### Day 1: Introduction to Preventive and Predictive Maintenance

- Overview of maintenance types and concepts.
- Benefits and challenges of preventive maintenance.
- The role of predictive maintenance in modern industries.
- Key differences between preventive and predictive maintenance.
- Case studies and real-world examples.

### Day 2: Tools and Technologies for Maintenance

- Introduction to maintenance management software.
- Condition monitoring tools and techniques.
- Sensors and IoT for predictive analytics.
- Data management and analysis for maintenance decisions.
- Hands-on session with maintenance management software.

### Day 3: Maintenance Planning and Scheduling

- Steps in developing a preventive maintenance schedule.
- Resource allocation and task prioritization.
- Creating maintenance checklists and protocols.
- Implementing reliability-centered maintenance (RCM).
- Workshop: Crafting a sample maintenance plan.

### Day 4: Implementing Predictive Maintenance Strategies

- Key components of predictive maintenance programs.
- Developing machine learning models for predictive analytics.
- Vibration analysis, thermography, and lubrication management.
- Predictive maintenance case studies and success stories.
- Group discussion: Integrating predictive techniques effectively.

## **Day 5: Enhancing Maintenance Efficiency**

- Continuous improvement in maintenance processes.
- Measuring maintenance performance metrics.
- Cost-benefit analysis of maintenance strategies.
- Future trends in maintenance technology and practices.
- Final Q&A session and feedback gathering.