



London TDM

# Mechanical and Electrical Engineering Training Courses

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

**Course Date:** From 05 July 2026 To 09 July 2026

**Course Place:** Downtown Dubai

**Course Fees:** 5,000 USD

## Introduction

This intensive 5-day course is designed for professionals seeking to deepen their understanding of motors and drives. Participants will learn how to select the right types of motors and drives for different applications, understand the principles behind their operations, and gain practical skills in maintenance for optimal performance. Our expert instructors will provide both theoretical knowledge and hands-on experience to ensure a comprehensive learning experience.

## Objectives

- Understand the types and functions of motors and drives in industrial applications.
- Learn criteria for the selection of suitable motors and drives based on specific operational requirements.
- Gain insight into common problems and troubleshooting techniques.
- Acquire skills in preventive and corrective maintenance to extend equipment lifespan.
- Develop an understanding of recent advancements and emerging technologies in motor and drive systems.

## Course Outlines

### Day 1: Introduction to Motors and Drives

- Overview of motor types and their applications
- Basic principles of drive systems
- Key components and their functions
- Introduction to control systems for motors and drives
- Safety measures and standards in motor operations

### Day 2: Selection Criteria for Motors

- Factors influencing motor selection
- Evaluating performance characteristics
- Energy efficiency considerations
- Cost analysis and budget considerations
- Case studies of motor selection in various industries

### Day 3: Drive Systems and Their Applications

- Types of drive systems and their applications
- Understanding speed torque characteristics
- Selection of drive components and power ratings
- Integration of drives with motor systems
- Case studies on drive applications

### Day 4: Maintenance Best Practices

- Routine maintenance and checks
- Common troubleshooting techniques
- Diagnosing and rectifying faults

- Preventive maintenance strategies
- Record-keeping and documentation

### **Day 5: Emerging Technologies and Trends**

- Recent advancements in motor technology
- Smart motors and IoT applications
- Energy-saving technologies and green initiatives
- Future trends in motors and drives
- Wrap-up session and panel discussion