London TDM

Mechanical and Electrical Engineering Training Courses

Course Venue: Malaysia - Kuala Lumpur

Course Date: From 01 March 2026 To 05 March 2026

Course Place: Royale Chullan Hotel

Course Fees: 6,000 USD

Introduction

This 5-day professional course on "HVAC Control Systems and Sensors" is designed to equip participants with a comprehensive understanding of HVAC (Heating, Ventilation, and Air Conditioning) control systems, focusing on modern sensor technology and integration. Attendees will gain hands-on knowledge to improve system efficiency, learn about the latest industry standards, and explore emerging trends in HVAC technology.

Objectives

- Understand the fundamentals of HVAC control systems and sensors.
- Explore the various types of sensors used in HVAC systems and their applications.
- Learn about the integration of control systems for improved energy efficiency.
- Examine industry standards and regulations related to HVAC systems.
- Gain insights into emerging trends and technologies in HVAC control systems.

Course Outlines

Day 1: Introduction to HVAC Control Systems

- Overview of HVAC systems
- Types of HVAC control systems
- Principles of operation of control systems
- Components of HVAC control systems
- Basic electrical concepts for HVAC systems

Day 2: HVAC Sensors and Their Applications

- Types of sensors used in HVAC systems
- Temperature and humidity sensors
- Pressure sensors and flow meters
- Occupancy and motion sensors
- Applications of sensors in HVAC control

Day 3: System Integration and Energy Efficiency

- Integration of control systems in HVAC
- Energy management and efficiency principles
- Building automation systems
- Advanced control strategies for energy savings
- Using data analytics for optimization

Day 4: Industry Standards and Regulations

- Overview of HVAC industry standards
- Regulations impacting HVAC systems
- Sustainability and environmental considerations
- Compliance and certification processes
- Case studies on regulatory impacts

Day 5: Emerging Trends and Future Directions

- Smart HVAC systems and IoT integration
- Trends in HVAC sensor technology
- Predictive maintenance and remote diagnostics
- Future challenges for HVAC control systems
- Workshop and Q&A session