London TDM

Mechanical and Electrical Engineering Training Courses

Course Venue: Malaysia - Kuala Lumpur

Course Date: From 05 April 2026 To 09 April 2026

Course Place: Royale Chullan Hotel

Course Fees: 6,000 USD

Introduction

Air Handling Units (AHUs) are critical components of HVAC systems, ensuring that indoor environments are properly ventilated, temperature-controlled, and maintain air quality. This 5-day professional course offers in-depth knowledge about the design and maintenance of AHUs, aimed at equipping engineering professionals, facility managers, and HVAC technicians with the skills needed to optimize AHU performance and longevity.

Objectives

- Understand the fundamentals of Air Handling Units.
- Explore the components and configurations of AHUs.
- Develop skills in designing efficient AHU systems.
- Learn how to identify and troubleshoot common AHU problems.
- Gain insights into maintenance strategies for AHUs.

Course Outlines

Day 1: Introduction to Air Handling Units

- Overview of HVAC systems and the role of AHUs.
- Types of AHUs and their applications.
- Basic components of an AHU.
- Understanding airflows and ventilation principles.
- Case studies on different AHU systems.

Day 2: Components and Configurations

- Fans, filters, and coils: Functions and selection.
- Exploring configurations for specific needs.
- Control systems and automation in AHUs.
- Energy recovery and sustainability considerations.
- Field visit to observe AHUs in action.

Day 3: Designing Efficient AHUs

- Principles of AHU design and engineering.
- Calculating air flow and load requirements.
- Integration with building management systems (BMS).
- Best practices for energy-efficient designs.
- Workshop: Designing an AHU system from scratch.

Day 4: Troubleshooting Common AHU Problems

- Identifying and diagnosing mechanical issues.
- Addressing air quality and humidity problems.
- Electrical troubleshooting in AHUs.
- Using diagnostic tools and software.
- Interactive session: Problem-solving in real-life scenarios.

Day 5: Maintenance Strategies and Best Practices

- Scheduled and predictive maintenance approaches.
- Cleaning and replacing filters and coils.
- Maintaining and optimizing control systems.
- Developing a comprehensive maintenance plan.
- Course recap and Q&A session.