London TDM

Mechanical and Electrical Engineering Training Courses

Course Venue: Malaysia - Kuala Lumpur

Course Date: From 10 May 2026 To 14 May 2026

Course Place: Royale Chullan Hotel

Course Fees: 6,000 USD

Introduction

The "Lighting Systems Design for Buildings" course is designed to provide professionals with comprehensive knowledge and skills in designing effective lighting systems for modern buildings. This intensive 5-day course covers various aspects of lighting design, including technical principles, energy efficiency, innovative solutions, and practical applications. Participants will gain the ability to create lighting designs that enhance functionality, aesthetics, and sustainability in building environments.

Objectives

- Understand the fundamental principles of lighting systems and design.
- Learn to integrate lighting solutions with building architecture and interiors.
- Explore energy-efficient lighting technologies and strategies.
- Develop skills in using lighting design software tools.
- Apply lighting design techniques to real-world building projects.

Course Outlines

Day 1: Introduction to Lighting Design

- Overview of Lighting Systems in Buildings
- Key Lighting Terminology and Concepts
- Light and Color: Understanding their Relationship
- Human Visual Perception and Lighting Requirements
- Initial Assessment of Lighting Needs in Various Spaces

Day 2: Components and Selection of Lighting Systems

- Types of Light Sources: Incandescent, LED, Fluorescent, etc.
- Understanding Luminaires and their Applications
- Selection Criteria for Lighting Components
- Lighting Controls and Automation
- Choosing the Right Lighting Solutions for Different Spaces

Day 3: Integration and Energy Efficiency

- Integrating Lighting with Architectural Design
- Daylighting and its Impact on Lighting Design
- Energy-Efficient Lighting Strategies
- Regulatory Standards and Compliance
- Case Studies: Successful Energy-Efficient Lighting Projects

Day 4: Advanced Lighting Design Techniques

- Introduction to Lighting Design Software
- Calculating Lighting Levels and Distribution
- Designing for Aesthetics vs. Functionality
- Developing Lighting Mock-ups and Prototypes
- Interactive Workshop: Designing a Lighting Plan

Day 5: Practical Applications and Case Studies

- Lighting Design for Commercial Spaces
- Lighting Solutions for Residential Buildings
- Special Considerations for Unique Environments
- Review of Cutting-Edge Lighting Technologies
- Final Project Presentation and Feedback