London TDM

Civil and Construction Engineering Training Courses

Course Venue: United Arab Emirates - Dubai

Course Date: From 11 January 2026 To 15 January 2026

Course Place: Downtown Dubai

Course Fees: 5,000 USD

Introduction

"Green Building and Sustainable Design" is a comprehensive course designed to equip professionals with knowledge and skills related to environmentally responsible and resource-efficient building practices. Over five days, participants will explore the principles of sustainable architecture and design, focusing on strategies that promote energy efficiency, reduce ecological footprints, and create healthier urban environments. The course combines theoretical insights with practical applications to help learners drive sustainable practices in the building industry.

Objectives

- Understand the fundamental principles of green building and sustainable design.
- Identify key sustainability certifications and standards.
- Learn techniques for energy efficiency and renewable energy integration.
- Explore sustainable materials and resource management strategies.
- Apply green building practices to real-world projects.

Course Outlines

Day 1: Introduction to Green Building

- Overview of sustainable development and its importance.
- Principles and benefits of green building practices.
- Global and local green building standards and certifications.
- Key stakeholders and their roles in green building.
- Case studies of successful green building projects.

Day 2: Sustainable Site Design

- Site assessment and selection for sustainability.
- Integrating natural landscapes and habitats in design.
- Stormwater management and water conservation techniques.
- Designing for sustainable transportation and mobility.
- Impact of site design on building energy performance.

Day 3: Energy Efficiency and Renewable Energy

- Energy modeling and performance assessment.
- Energy-efficient building design strategies.
- Integration of renewable energy sources and technologies.
- Smart building systems and energy management.
- Net-zero and passive building design concepts.

Day 4: Sustainable Materials and Resources

- Selection criteria for sustainable building materials.
- Life cycle assessment and environmental impact of materials.
- Reducing waste through design and resource efficiency.
- Recycling and upcycling of construction materials.

- Biophilic design and its impact on occupants' well-being.

Day 5: Implementing Green Building Practices

- Integrating sustainability into the design process.
- Tools and software for sustainable design and analysis.
- Policy frameworks supporting green building initiatives.
- Overcoming challenges in implementing sustainable practices.
- Project work and presentation of sustainable design solutions.