



London TDM

# Civil and Construction Engineering Training Courses

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

**Course Date:** From 12 April 2026 To 16 April 2026

**Course Place:** Downtown Dubai

**Course Fees:** 5,000 USD

## Introduction

This comprehensive 5-day professional course on "Traffic Engineering and Transportation Planning" is designed to equip participants with a thorough understanding of the principles and practices that underpin traffic engineering and transportation planning. Through a combination of theoretical insights and practical examples, participants will gain essential skills to address current and future challenges in the field.

## Objectives

- Understand the fundamental principles of traffic engineering and transportation planning.
- Analyze current transportation issues and propose effective solutions.
- Explore modern technologies and their applications in traffic management.
- Enhance skills in data analysis and interpretation specific to transportation studies.
- Develop effective transportation plans and policies for urban and rural settings.

## Course Outlines

### Day 1: Introduction to Traffic Engineering

- Overview of Traffic Engineering and Its Importance
- Basic Traffic Flow Concepts and Theories
- Traffic Data Collection and Analysis Techniques
- Introduction to Traffic Safety Principles
- Case Studies: Successful Traffic Engineering Projects

### Day 2: Transportation Planning Fundamentals

- Principles of Transportation Planning
- Transportation System Components and Functions
- Land Use and Transportation Interaction
- Travel Demand Modeling and Analysis
- Public Involvement and Stakeholder Engagement in Planning

### Day 3: Urban Transportation Systems

- Characteristics of Urban Transportation Systems
- Public Transit Planning and Operations
- Non-Motorized Transport Alternatives
- Traffic Congestion: Causes and Mitigation Strategies
- Integrating Technology in Urban Transportation

### Day 4: Rural and Developing Region Challenges

- Understanding Rural Transportation Needs
- Design and Management of Rural Road Networks
- Transportation Challenges in Developing Regions
- Innovative Solutions for Resource-Limited Areas
- Collaboration with Local Governments and Communities

## **Day 5: Future Trends and Policy Development**

- Trends in Transportation Technologies and Innovations
- Environmental and Sustainability Considerations
- Policy Development and Regulatory Frameworks
- Preparing for Autonomous and Connected Vehicles
- Course Review and Final Assessment