



London TDM

# Civil and Construction Engineering Training Courses

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

**Course Date:** From 05 July 2026 To 09 July 2026

**Course Place:** Downtown Dubai

**Course Fees:** 5,000 USD

## Introduction

AutoCAD is an essential tool for civil engineers, providing the capabilities to design, draft, and model infrastructure projects with precision and efficiency. This 5-day professional course is designed to equip civil engineers with the skills needed to effectively use AutoCAD in their projects. Through hands-on experience and practical exercises, participants will gain comprehensive knowledge of AutoCAD, enabling them to enhance their design capabilities and productivity.

## Objectives

- To understand the fundamental concepts of AutoCAD for civil engineering projects.
- To develop proficiency in creating and editing civil engineering drawings.
- To learn to use AutoCAD tools for modeling and analyzing civil structures.
- To enhance skills in collaboration and project management using AutoCAD.
- To apply AutoCAD features to optimize civil engineering design processes.

## Course Outlines

### Day 1: Introduction to AutoCAD

- Overview of AutoCAD interface and tools.
- Setting up drawing units and scales for civil engineering projects.
- Basics of creating and modifying simple drawings.
- Understanding layers and their management.
- Introduction to drawing annotation and dimensioning.

### Day 2: Advanced Drawing Techniques

- Utilizing drafting settings for precision drawing.
- Advanced object modification and manipulation techniques.
- Working with blocks, attributes, and libraries for efficient workflows.
- Introduction to 2D geometry creation for civil layouts.
- Utilizing hatching and gradient fill techniques.

### Day 3: Working with 3D Modeling

- Introduction to 3D modeling concepts in AutoCAD.
- Creating simple 3D structures for civil engineering.
- Using surface and solid modeling tools.
- Modifying and editing 3D models.
- Converting 2D drawings to 3D models.

### Day 4: Civil Engineering Applications

- Designing roadways and bridges with AutoCAD Civil 3D integration.
- Preparing site and grading plans.
- Creating profiles and cross-sections for infrastructure projects.
- Stormwater management and drainage design.
- Collaborating on large-scale construction projects.

## **Day 5: Final Project and Review**

- Working on a final project incorporating all learned concepts.
- Review and critique of design and modeling workflows.
- Circular design and iterative project enhancements.
- Exploring AutoCAD customization and automation features.
- Course review and feedback session.