



AUTODESK CIVIL 3D

Additional Training

The following nine additional courses are specifically designed for those that want to specialise in using Civil 3D for a particular task or in connection with their own job. The course timings are indicative only and can vary if one or more courses are chosen at once.

1. Civil 3D Settings and Templates 1 Day

This course provides new and experienced users with help in updating drawing settings within Civil 3D and in creating and updating Civil 3D styles. Topics include:

- Introduction
- The need for a Civil 3D Template (DWT)
- Drawing Settings
- Standard Styles
- Label Styles
- Table Styles
- Common Styles
- Command Styles
- Standard and Customised Templates including the UKIE Template
- Copying Styles between Drawings and Templates

2. Civil 3D for Surveyors 2 Days

This course is aimed specifically at those collecting and processing field survey data and wishing to convert this into a 3D drawing and model. Topics include:

- Introduction
- The Survey Tab
- Setting up Survey Databases
- Point Styles
- Description Key Sets
- Figure Prefix Databases
- Linework Code Sets
- Loading and Editing a Field Book
- Processing a Field Book
- Editing the Drawing
- Creating a 3D Surface
- Evaluating and Editing the Surface

3. Geotechnical Module 2 Days

This course is aimed at those wishing to use Civil 3D to view borehole and trial pit data within a Civil 3D environment. Topics include:

- Introduction
- The Geotechnical Module
- Format of Borehole Data
- Setting up a Project within Civil 3D
- Importing and Processing Borehole Data
- Viewing the Various Sub-Surface Data
- Displaying Multi-Surface Data on a Profile
- Creating a Plume Surface
- Creating an Isopachyte Surface
- Volume Calculations

4. Advanced Road Design 2 Days

This course is aimed at the Highway Engineer wishing to expand on the basic training and undertake some more advanced road and alignment design. *N.B. This is a user-structured course which could also include topics in courses 4a, 4b and 4c depending on your requirements. If Roundabout Design is selected, then one day needs to be allocated for this topic alone.* Topics include:

- Introduction
- Offset Alignments
- Widened Alignments
- Lay-Bys
- Traffic Calming (Speed Tables etc)
- Islands and Vehicle Crossovers
- Flexible Assemblies
- Width and Offset Targets
- Slope and Elevation Targets

4a. Junction Design

This course expands on the advanced alignment design and shows the highway engineer how to use the manual and automatic tools in Civil 3D to create a junction. Topics include:

- Introduction
- The Principles of Junction Design
- Creating a Secondary Alignment, Profile and Corridor
- Corridor Surface Creation
- The Manual Process of Junction Design
- The Junction Wizard
- Standard and Customised Junction Assemblies
- Pasting Corridor Surfaces
- The Completed Junction

4b. Roundabout Design

This course is aimed at those wanting to design a roundabout in Civil 3D. Topics include:

- Introduction
- The Principles of Roundabout Design
- The Roundabout Wizard
- Creating Tilted Planes
- Creating the Channel Alignments and Profiles
- Creating the Final Roundabout

4c. Sub-Assembly Composer

This course is aimed at those wishing to create and amend their own library of sub-assemblies. Topics include:

- Introduction
- The Sub-Assembly Composer
- Creating a Simple Sub-Assembly
- Creating More Complex Sub-Assemblies
- Importing PKT Files into Civil 3D

5. Site Development Tools 1 Day

This course is aimed at those wanting to use Civil 3D to design more complex shapes using the grading tools. Topics include:

- Introduction
- Creating and Editing Feature Lines
- Stepped Offsets
- Pond and Car Park Design
- Surface Creation
- Breaklines
- Isopachyte Surfaces
- Manual Volume Calculations

6. Converting and Translating Data 1 Day

This course explains data sharing and transferring a Civil 3D model into an earlier version of Civil 3D. It also explains how to import or export a model from or into an alternative highway design package. Topics include:

- Introduction
- Sharing Data Shortcuts
- Promoting Data Shortcuts
- e-Transmit
- Land XML
- GENIO Import and Export Facility

7. Autodesk Vehicle Tracking (AVT) 1 Day

This course guides the user through the AVT module. Topics include:

- Introduction
- Principles of the AVT Module
- Settings
- Included Vehicles
- Manually Creating the Swept Path
- Following a pre-defined Route
- Creating your own Vehicle Type, Size and Configuration

8. AutoCAD Map Tools 1 Day

This course is aimed at explaining the basics of the AutoCAD Map module within Civil 3D. Topics include:

- Introduction
- The Principles of AutoCAD Map
- Workspaces
- Principles of a Work Session
- Attaching Drawings to a Work Session
- Queries
- Using AutoCAD Map as an Import/Export Facility to another GIS System
- FDO

9. M-Color 1 Day

This course explains the use and benefits of M-Color in drawing presentation. Topics include:

- Introduction
- The Principles of M-Color
- The Configuration File
- Layers
- Colour Palettes
- Graduation Colours
- Transparent Colours
- Texture Fills
- Plotting (MCL Files)
- Reviewing and Editing the Result
- Creating PDF Outputs