



AutoCAD Civil 3D Essentials for Surveyors

Who Should Attend?

The course is designed for delegates who are new to working with AutoCAD Civil 3D.

Delegates should have a working knowledge of AutoCAD. It is also recommended that delegates have a working knowledge of Microsoft Windows 7 or newer and know how to navigate the Internet.

Objectives

This course is designed to teach the essential elements of AutoCAD Civil 3D to new users.

Agenda

Learn the essentials of AutoCAD Civil 3D in this two-day training course, intended to give users comprehensive experience with the features and benefits of AutoCAD Civil 3D. Hands-on exercises throughout the course to explore how to create Civil 3D models and associated outputs.

Note: We normally train on the latest version.

During the course delegates will cover:

Day 1:

1. The Civil 3D Environment (basic introduction to the following)

- Civil 3D foundation products (AutoCAD 2D & 3D, MAP 3D, Civil 3D)
- Application Menu
- Templates (including UKIE Template)
- Workspace
- Ribbon Menus
- Toolspace (Prospector, Settings, Survey, Toolbox)
- Change Style
- Quick Profile
- Drawing Area
- Command Line
- Panorama

2. Importing and Creating Points

- Create Points Manually
- Create Point Style
- Create Label Styles
- Create Point Groups
- Import Point File

3. Description Key Sets

- Create Description Key Set
- Parameters
- Modify Import File
- Apply Description Key Set

(Day 1 continued on next page)

Day 1 (continued):

4. Survey Tools

- Survey Database
- Survey Equipment
- Figure Prefix Database
- Linework Code Sets

5. Import Survey Data

- Create Survey Database
- Import Survey File
- Create Survey Network
- Create Figure Prefix Database
- Create Figure Styles

6. Survey Figures

- Import Survey Figures
- Manually Create Survey Figure
- Editing Raw Data Files

7. Translating Survey Data

- Translate or Transform
- Lock Points
- Translate Survey

Day 2 – Review Learning Objectives from Day 1:

1. Survey Analysis

- Least Squares Analysis
- Create Traverse
- Travers Analysis
- Updating Survey Database

2. Multiple Networks

- Create Connected Traverse

3. Create and Analyse a Surface

- Import a PENZ.csv file
- Object Viewer
- Quick Profile
- Surface analysis (spot levels, slopes, contours, water drop, catchments, colour banding)
- Change Style

4. Surface Editing and Filtering

- Move, Edit point
- Delete/Add Lines
- Swap Edge
- Add Breaklines
- Create Surface Boundaries
- Surface Definitions (exclude greater than, less than, by internal TIN angle etc.)

5. Create Cross Sections

- Create Sample Lines
- Create Cross Sections
- Annotate Sections

6. Drawing Production

- Create View Frame Groups
- Create Sheets for Plans/Profiles
- Create Section Sheets

7. Sharing Dynamic Data

- Data Shortcuts

8. Assessment Exercise

- Short exercise (30 mins) based on lessons learnt over the 2 days training

The above may be varied to suit client's preferences and requirements.

Qualifications

On completion of the course you will be presented with an Autodesk Authorised Training Certificate.



01784 419908



training@cadline.co.uk

k



www.cadlinetraining.co.uk

cadline