

Learning AutoCAD Civil 3D

Description:**Duration: 3 days**

Learn the essentials of AutoCAD® Civil 3D® in this three-day training class, intended to give users comprehensive experience with the features and benefits of AutoCAD Civil 3D. Hands-on exercises throughout the guide explore how to create 2D and 3D drawings.

Course Objectives:

The primary objective of this class is to familiarize users with the concepts and applications of the essential functions of AutoCAD Civil 3D.

After completing this course, students will be able to:

- Work within the Civil 3D environment.
- Import and work with survey data.
- Create, edit, and manage points.
- Create, edit, and analyze surfaces.
- Create parcels and parcel tables.
- Create and edit horizontal alignments for sites.
- Create and edit profiles for sites.
- Create and work with assemblies and corridors for sites.
- Create a grading solution and grading quantities for sites.
- Create and edit pipe networks for sites.
- Create and edit transportation alignments and profiles.
- Create and edit transportation assemblies and corridors.
- Create and edit transportation cross sections and quantities.
- Create and manage plan sets.
- Manage Civil 3D data.

Who Should Attend & Prerequisites:

Users who want to learn essential elements of AutoCAD Civil 3D for creating, analyzing, and managing civil engineering drawings and projects. Before using this courseware, the student should have a working knowledge of the following:

- Microsoft® Windows® Vista, Microsoft® Windows® XP, or Microsoft® Windows® 2000.
- How to navigate the Internet.



Civil 3D Essentials Course Outline:

Day 1

AutoCAD Civil 3D Environment

- The User Interface
- Examining Toolspace
- Creating Objects, Object Styles, and Label Styles
- Creating Drawing Templates
- Creating Reports

Working with Survey

- Creating Survey Databases
- Creating Survey Networks
- Creating Figure Styles and Prefixes
- Importing Survey Data
- Working with Survey Data

Points

- Importing and Creating Points
- Managing Points

Surfaces

- Creating Surfaces
- Modifying Surfaces
- Creating Surface Styles

Site Design - Parcels

- Creating Sites
- Creating Right-of-Way Parcels
- Creating Parcels
- Editing Parcels
- Labeling Parcel Segments and Creating Tables

Day 2

Site Design - Alignments

- Creating Alignments from Objects
- Labeling Alignments and Creating Tables

Site Design - Profiles

- Creating Surface Profiles and Profile Views
- Creating Layout Profiles
- Editing Profile Geometry
- Labelling Profiles and Profile Views

Site Design - Assemblies and Corridors

- Creating Assemblies
- Creating Corridor Models
- Creating Corridor Surfaces

Site Design - Grading and Quantities

- Creating Feature Lines
- Creating Interim Grading Surface
- Creating Final Grading Surfaces and Calculating Volumes
- Labeling Final Grading Surface

Site Design - Pipes

- Creating Pipe Networks
- Drawing and Editing Pipe Networks
- Labeling Pipes
- Designing Storm Sewer Networks



Day 3

Transportation - Alignments

- Designing Criteria-Based Alignments
- Apply Superelevations
- Creating Offset Alignments

Transportation - Assemblies and Corridors

- Creating and Modifying Transportation Assemblies
- Creating Transportation Corridors
- Creating Transportation Corridor Surfaces
- Creating Intersections
- Modeling Road Designs in 3D

Transportation - Sections and Quantities

- Creating Sample Lines
- Calculating Corridor Quantities
- Creating Quantity Reports
- Creating Section Views

Manage Data

- Plan Production
- Working with Data Shortcuts and Reference Objects
- Calculating Quantity Takeoff Using Pay Items
- Working with Autodesk Vault

