AutoCad Civil 3D Land Development Training

Description

Course Description

The primary focus of this courseware is to teach the trainers how AutoCAD Civil 3D can be used as a tool to perform common engineering tasks in the modeling and design process more accurately and in less time. Trainers use AutoCAD Civil 3D application to complete the engineering tasks on road design. Generate a dynamic model of any road, rail, or corridor project based on design elements, including alignments, profiles, super elevation, and criteria included in design subassemblies and basic skills needed to create, model and modify intersections and Cul-de-Sacs.

Course Outline

Getting Started With Civil 3D

- Civil 3D user interface
- How to find help and documentation
- Introduction to the main Civil 3D objects points, alignments, profiles, surfaces
- How to create Civil 3D objects
- Introduction to settings in Civil 3D
- How to manage drawings

Working with Points

- An overview of points
- Working with point settings
- Creating new points
- More about creating points
- More about creating points
- Using description keys to manage points
- Using point groups to manage points
- Displaying points
- Editing and modifying points

Working with Alignments

- An overview of alignments
- Creating alignments from polylines and other entities
- Creating alignments by layout
- Editing alignments
- Creating points along an alignment
- Labeling alignments
- Alignment labels and tables
- Generating alignment reports

Working with Surfaces

- An overview of surfaces
- Creating surfaces
- Adding break lines to surfaces
- Surface boundaries
- Displaying contours
- Changing contour styles

Working with Surfaces

- Using surface utilities

Working with Profiles

- An overview of profiles
- Creating existing ground profiles
- Working with profile styles and profile views
- Creating proposed roadway profiles
- Editing proposed roadway profiles
- Checking profile designs vs design criteria
- Labeling profiles
- Creating quick profiles and profile reports

Working with Sections

- Overview of sections
- Creating sample lines for sections
- Creating existing ground sections
- Working with section styles
- Working with Assemblies and Subassemblies
- An overview of assemblies
- Creating Assemblies
- Editing Assemblies
- Creating Subassemblies
- Managing Assemblies

Working with Corridors

- Corridors-Overview
- Preparing Existing Surfaces for Corridors
- Creating Corridors-Part I
- Creating Corridors-Part II
- Editing Corridors
- Viewing Corridor Existing Cross-Sections
- Creating Proposed Corridor Cross-Sections
- Editing Corridor Cross-Sections
- Creating Corridor Surfaces and Renderings
- Calculating Corridor Earthwork Volumes
- Exporting Corridors

Creating Cul-de-Sacs

- Designing a Cul-de-Sac Bulb
- Creating a Corridor Surface and
- Cul-de-Sac Island
- Preparing to Plot the Cul-de-Sac

Creating Knuckles

- Creating a Knuckle Surface
- Revising the Knuckle