STANFORD
IT LEARNING
The Training Division of **cim**
Technologies, Inc.

THE POWER TO BE INNOVATIVE

Autodesk Civil 3D 2016 Fundamentals
Course Length: 3 days (24 hours)

Objectives

The objective of this course is to introduce users to Civil 3D, incorporating the tools necessary to create civil engineering, drafting, and GIS project documentation. The training also enables students to edit and analyze surfaces, alignments, shortcuts, sites, profiles, cross-sections, assemblies, corridors, intersections, grading solutions, pipe networks, quantity take off and volume calculations.

Who Should Attend

This course is intended for civil engineers and surveyors who are knowledgeable in the concepts of civil engineering.

Prerequisites

Experience with AutoCAD® or AutoCAD-based products and a sound understanding and knowledge of civil engineering terminology.

Notes

The indicated course length is a guideline. Topics and duration may be modified by the instructor based upon the knowledge and skill level of the participants.

Course Description

The AutoCAD® Civil 3D® 2016 Fundamentals training guide is designed for Civil Engineers and Surveyors who want to take advantage of AutoCAD® Civil 3D® software's interactive, dynamic design functionality. The AutoCAD Civil 3D software permits the rapid development of alternatives through its model-based design tools. You will learn techniques enabling you to organize project data, work with points, create and analyze surfaces, model road corridors, create parcel layouts, perform grading and volume calculation tasks, and layout pipe networks.

Course Outline

The AutoCAD Civil 3D Interface
Product Overview
AutoCAD Civil 3D Workspaces
AutoCAD Civil 3D User Interface
AutoCAD Civil 3D Toolspace
AutoCAD Civil 3D Panorama
AutoCAD Civil 3D Templates,
Settings and Styles

Parcels
Lines and Curves
Introduction to Parcels
Creating and Editing Parcels by
Layout Overview
Creating and Editing Parcels
Renumbering Parcels
Parcel Reports
Parcel Labels
Parcel Tables

Survey
Points Overview
Point Settings
Creating Points
Importing Survey Data
Point Groups
Reviewing and Editing Points
Point Reports

Surfaces
Surface Process
Surface Properties
Contour Data
Other Surface Data
Breaklines and Boundaries
Surface Editing
Surface Analysis Tools
Surface Labels
Surface Volume Calculations
Surface Analysis Display

Alignments
Roadway to Design Overview
AutoCAD Civil 3D Sites
Introduction to Alignments
Alignments Layout Tools
Alignment Properties
Labels and Tables

Profiles
Profiles Overview
Create a Profile View Style
Create Profiles from Surface
Create Profile View Wizard
Finished Ground Profiles
Create and Edit Profiles

Corridors
Assembly Overview
Modifying Assembles
Creating a Corridor
Corridor Properties
Designing Intersections
Corridor Surfaces
Corridor Section Review and Edit
Corridor Visualization

Grading
Grading Overview
Feature Lines
Grading Tools
Modifying AutoCAD Civil 3D
Grading

Pipe Networks

Pipe Overview
Pipes Configuration
Creating Networks from Objects
The Network Layout Toolbar
Network Editing
Annotating Pipe Networks
Pressure Pipe Networks

Quantity Take Off/Sections
Sample Line Groups
Section Volume Calculations
Section Views

Plan Production
Plan Production Tools
Plan Production Objects
Plan Production Object Edits
Creating Sheets
Sheet Sets

AUTODESK.
Authorized Training Center
Authorized Certification Center