Class Description

This course will equip the surveyor with the basic knowledge needed to use Civil 3D efficiently in a typical daily workflow. From exporting data from field equipment to importing the converted data into a standardized environment in Civil 3D and utilizing the automation tools to create an Existing Condition Plan. Focus is more on styles, proper AutoCAD drafting techniques and also the methodology needed to create line work effectively for variables used in defining symbology, surfaces, categorizing points and importing imagery on State Plane Coordinate Systems from Google Earth.

Prerequisites: Prior experience with AutoCAD and a basic understanding of the Surveying profession.

Class Length: 2 days

Course Topics

The AutoCAD Civil 3D Interface
- Production 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.

Connecting to GIS Data
- Introduction to the Planning and Analysis Workspace
- Coordinate Systems
- Geospatial Data Connection
- Create Surface from GIS Data

Survey Setup
- Survey Workflow Overview
- Collecting Field Data
- Introduction to the Survey Toolspace
- Survey Figures
- The Survey Database
- Lines and Curves
- Coordinate Geometry Editor

Points
- Points Overview
- Point Label Styles
- Point Settings
- Creating Points
- Transparent Command
- Description Key Sets
- Importing and Exporting Points
- Point Groups
- Reviewing and Editing Points
- Locking/Unlocking Points
- Point Reports

Points with Connective Codes
- Field Codes
- Survey Data – Figures
- Survey Data – Line Code
- Translating a Survey Database

Field Book Files
- Survey Networks
- Importing a Field Book
- Working with Figures
- Filtering a Survey Data

Surfaces
- Surface Process
- Surface Properties
- Surface Data
- Breakline and Boundaries
- Surface Editing
- Surface Analysis Tools
- Surface Labels
- Surface Volume Calculations
- Surface Analysis Display
- Point Cloud Surface Extraction