

## **CIVIL 3D**

### **COURSE CONTENT**

#### **Getting Started with Civil 3D**

Introduction to AutoCAD Civil 3D

The User Interface, Workspaces, Ribbon, Using the Toolspace, Prospector, Settings

Working with Settings - Overview

Working with Settings - Drawing Settings

Working with Drawing Templates

AutoCAD Civil 3D (Imperia I) NCS.dwg

AutoCAD Civil 3D (Metric) NCS.dwg

#### **Working with Points**

Points - Key Concepts

Points in a Drawing (Create Manual)

Point Settings

Object Styles

Styles - Point style

Editing Points

Points in a Drawing (Northing I Easting)

Points in a Drawing (Bearing and Distance)

Point Groups

Importing Points

Displaying Imported Points

#### **Lines, Tables and Parcels (Tools 2D in Civil 3D)**

### **Working with Lines and Tables**

Lines

Label Styles - Basic Concepts

Using Label Styles

Label Sets and Modifying Labels

Point Tables

Lines Tables

Styles- Point Table style

### **Working with Parcels**

Parcels -Overview Parcels

Parcels from Objects

Parcel Styles

Styles - Parcel Styles

Parcel Creation Tools

Getting Information about Objects

Renumbering Parcels

Labeling Parcel Areas and Segments

Annotative Properties of Labels

### **Surfaces (Creating Original Surface)**

Surfaces - Overview

Surface Modeling-Triangulated Irregular Network (T.I.N)

Surfaces, Working with Surfaces

Creating Surfaces, Working with Points

Creating Surfaces, Working with Contours

Using Surface Utilities

Styles -Surface style

Contours Style, Label Contours, Smoothing

Labeling Surfaces - Contours Labeling Surfaces

Labeling Surfaces - Slope and Spot Elevations

Improve Surface Modeling - Boundaries and Break lines

Adding Boundaries to Surfaces

Adding Break lines to Surfaces

Performing a Surface Analysis: Elevation Analysis

### **Grading (Creating Modified Surface)**

Grading Tools-Overview

Grading

Feature Line

Grading Design and create a Grading Model

Grading, Feature Line and Surface Interaction

Feature Lines - Adjust Footprint Location and Elevation

Grading - Adjust Grading Slope Parameters

### **Sections, QTO (quantity take off) and Earthmoving**

#### **Calculation**

Calculating Surface Volumes- Overview

Creating an Alignment for Earthmoving Purposes

Sections - Overview

Sample Lines

Styles - Sample Lines Style

Section Views

Calculating of Earthwork Material

Creating Total Earth moving table