

# **AutoCAD Civil 3D Advanced**

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## **Overview**

AutoCAD Civil 3D Advanced introduces advanced techniques and teaches you to be proficient in your use of the AutoCAD Civil 3D Software.

The primary objective is for students to become proficient in:

- Interchange Design
- Storm water and Sewer Design
- Platform Grading and Pond Design
- Customization of Civil 3D

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## **Prerequisites**

Students who attend this course must have been on the 4 days [AutoCAD Civil 3D Essentials](#) (Click for More) course, have worked with

Civil 3D for at least 6 months and have to be familiar with the following:

- Create and manipulate surfaces
- Design roads, horizontal, vertical alignments, assemblies
- Layout storm water and sewer lines
- Grade surfaces, determine cut and fill volumes

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## **Available Exams and Certifications**

- [Autodesk Certified User](#) (Click for More)

- [Autodesk Certified Professional](#) (Click for More)
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## **Course Outline**

### Interchange Design:

- Create horizontal and vertical alignments for the main and side road
- Design custom assemblies and create the road corridor
- Create road drawings and publish to PDF or
- DWF

### Storm Water and Sewer Design:

- Establish watersheds and check flow paths
- Create storm water and sewer systems
- Analysis of flow, velocity and quantity

### Platform grading and pond design:

- Layout building platforms
- Create grading groups
- Design an attenuation pond
- Perform cut/fill operations
- Create cross sections
- Label surfaces and create drawings

### Customization of Civil 3D:

- Create custom labels
- Design custom title blocks
- Use formulas to create custom labels and Tables

### More to be covered in the AutoCAD Civil 3D Advance course:

- Points overview and styles
- Importing points and coordinate transforms
- Creating points and drafting
- Point groups, grips, and reports
- Introduction to data collection in the field
- Introduction to AutoCAD Civil 3D Survey and automated line work
- Survey networks
- Survey Least Squares analysis
- Traverses and their adjustment
- Traverse Loop and Closed Connected Loop adjustments
- Surface overview
- Surface editing

- Surface labels and analysis
- Introduction to Grading
- Parcel Grading
- Building Pad Design
- Parking Lot Design
- Pond Design
- Lagoon Design
- Combining Surfaces
- Visualization of Grading