AutoCAD Civil 3D Grading

Course Length: 2 days

The AutoCAD® Civil 3D® software supports a wide range of civil engineering tasks and creates intelligent relationships between objects. The AutoCAD Civil 3D Grading training course is recommended for users that are required to create site grading plans using the AutoCAD Civil 3D software. This training course is also ideal for managers that require a basic overview and understanding of this aspect of the AutoCAD Civil 3D software.

Users use feature lines, grading tools, and corridors to create a commercial site containing a parking lot, building pad, pond, and simple sewage lagoon. An existing road has been included in the survey and a survey team collected the existing conditions. Users also work on a residential site to grade a small subdivision for proper grading of each lot.

Topics Covered

- Introduction to Grading
- Parcel Grading
- Grading using Feature Lines
- Grading using Grading Objects and Grading Groups
- Calculating pond staging storage values
- Grading using Corridors
- Combining Surfaces
- Visualization

Prerequisites

AutoCAD® Civil 3D® Fundamentals
Training Guide Contents

Chapter 1: Introduction to Grading
- 1.1 Overview
- 1.2 Tools in AutoCAD Civil 3D
- 1.3 Settings and Defaults
- 1.4 Feature Line Styles
- 1.5 Grading Group Styles
- 1.6 Grading Criteria Sets
- 1.7 Surface Styles
- 1.8 Sites Overview

Chapter 2: Parcel Grading
- 2.1 Setting Parcel Line Elevations
- 2.2 Retaining Walls
- 2.3 Editing Surfaces
- 2.4 Feature Line Interactions With Parcel Lines

Chapter 3: Building Pad Design
- 3.1 Feature Lines Overview
- 3.2 Create Feature Lines from Objects
- 3.3 Grading Creation Tools
- 3.4 Editing the Grading
- 3.5 Grading Volume Tools

Chapter 4: Parking Lot Design
- 4.1 Draw Feature Lines
- 4.2 Create a Temporary Surface
- 4.3 Edit Feature Line Geometry
- 4.4 Copy or Move Feature Lines from One Site to Another
- 4.5 Create a Transitional Grading Group
- 4.6 Create a Grading Surface
- 4.7 Add Feature Lines to a Grading Surface

Chapter 5: Pond Design
- 5.1 Feature Line Review
- 5.2 Edit Elevations
- 5.3 Create Feature Lines From Corridors
- 5.4 Edit Geometry
- 5.5 Creating Complex Grading Groups
- 5.6 Pond Staging Volumes

Course description shown for Autodesk AutoCAD Civil 3D 2018. Topics, curriculum, and/or prerequisites may change depending on software version.
Chapter 6: Grading with Corridor Models

- 6.1 Corridor Baselines
- 6.2 Profiles
- 6.3 Create Grading Assemblies
- 6.4 Creating Complex Corridors
- 6.5 Modify Corridor Grading

Chapter 7: Combining Surfaces

- 7.1 AutoCAD Civil 3D Projects
- 7.2 Data Shortcuts

Chapter 8: Visualization

- 8.1 Introduction to the 3D Modeling Workspace
- 8.2 Basic 3D Viewing Tools
- 8.3 Working with Materials
- 8.4 Specifying Light Sources
- 8.5 Rendering Concepts

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The following cancellation policy shall apply to all training engagements, Live Online, Consulting Services and Dedicated/Custom Training:

- Company reserves the right to reschedule or cancel the date, time and location of its class at any time. In the event that a Training Class is cancelled by Company, Customer is entitled to a full refund. Company shall not be responsible for any other loss incurred by Customer as a result of a cancellation or reschedule.

- For Customer cancellations when written notice is received (i) at least ten (10) business days in advance of the class, the Customer is entitled to a full refund of its payment or reschedule enrollment, (ii) less than ten (10) business days, Customer shall not be entitled to a refund, but shall receive a class credit to be used within three (3) months of the date of the original class.

- Student substitutions are acceptable with at least two (2) days prior notice to the class, provided substitution meets course prerequisites and is approved by Company’s Training Coordinator (trainingcoordinator@rand.com)

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To request more information or to see training locations, visit www.imaginit.com/contact-us.