AutoCAD Civil 3D 2017

258 lessons : 19:43:36 (hh:mm:ss)

Description:

CADLearning for AutoCAD® Civil 3D® teaches the use of AutoCAD Civil 3D as a surface construction modeling tool for infrastructure professionals. The content in this course has been devised to help users quickly learn the most efficient methods for designing a surface model, starting with points and working toward a completed corridor.

- **Getting Started**
  - Introducing Civil 3D
  - Understanding the User Interface
  - Understanding Workspaces in the User Interface
  - Using the Ribbon
  - Managing Your Drawings
  - Understanding the Toolspace
  - Understanding the Toolspace Prospector Tab
  - Configuring Your Drawing Settings
  - Configuring the Toolspace Settings Tab
  - Understanding the Command Settings for Objects
- **Styles and Objects**
  - Understanding Objects and Their Properties
  - Understanding Objects and Their Styles
  - Understanding Object Styles
  - Switching and Deleting Styles
  - Understanding Reference Styles
  - Sharing and Updating the Reference Style Template
  - Sharing Styles between Drawings
  - Understanding How to Work with Label Styles
  - Labeling Your Objects
  - Adding a Leader to a Label
  - Creating Drawing Templates
  - Working with Label Sets and Manipulating Labels
  - Manipulating Labels Using Annotative Properties
  - Re-Associating Labels to a Different Object
  - Understanding the Inquiry Tool Palette
  - Creating Lines in Conjunction with the Transparent Commands
  - Creating Curves in Conjunction with the Transparent Commands
  - Understanding Property Data Sets
- **Feature Lines**
  - Working with Feature Lines
  - Creating Feature Lines
  - Working with Feature Line Styles
  - Working with Feature Line Labels
  - Creating Feature Lines from Objects
  - Creating Feature Lines from Corridors
  - Creating Feature Lines from Alignments

    - Editing Feature Lines
- **Working with Survey Tools**
    - Understanding the Survey Tools
    - Understanding the Survey User Settings
    - Creating an Equipment Database
    - Working with Survey Databases
    - Creating a Figure Prefix Database
    - Setting up Linework Code Sets
    - Importing Point Files and Field Books
    - Working with Survey Queries
    - Creating and Analyzing a Survey Network and Using the Survey Command Window
    - Understanding and Creating Figures
    - Creating a Complete Traverse in the COGO Editor
    - Balancing a Traverse in the COGO Editor
    - Opening a Traverse in the COGO Editor
    - Inserting a Polyline with the COGO Editor
    - Inserting COGO Points with the COGO Editor
- **Working with Points**
    - Understanding Points
    - Working with Point Settings
    - Creating Points in a Drawing
    - Working with Point Label Styles and Point Marker Styles
    - Creating Description Key Sets
    - Importing Description Keys and Other Land Desktop Project Data
    - Importing Points
    - Displaying Points
    - Creating Point Groups
    - Adding a Label to a Point Group
    - Understanding Point Group Display Order
    - Using Point Groups
    - Moving Points
    - Manipulating the Point Label
    - Locking and Unlocking Points
    - Creating Point Tables
    - Creating Reports for Points
- **Transferring Data**
    - Importing Data from Land Desktop
    - Working with LandXML Data
    - Using eTransmit
- **Working with Parcels**
    - Understanding Parcels
    - Understanding Parcel Object Styles
    - Creating Parcels from Objects and Controlling Their Hierarchy
    - Creating Right-of-Way Parcels
    - Working with the Parcel Creation Tools Toolbar
    - Editing Parcels
    - Renumbering Parcels
    - Labeling Parcel Areas

    - Editing Label Precision and Creating Block Labels
    - Labeling Single Parcel Segments
    - Labeling Multiple Parcel Segments
    - Creating Parcel Tables
    - Creating Parcel Reports
- **Working with Surfaces**
    - Understanding Surfaces
    - Creating Surfaces with Point Groups and Point Files
    - Working with Surface Styles
    - Labeling Single Surface Contours
    - Labeling Multiple Surface Contours
    - Modifying Contour Label Precision
    - Labeling Slope and Spot Elevations
    - Creating Surfaces from a Point Cloud
    - Creating Surfaces Using Existing Polyline Contours
    - Creating Surfaces with Existing Elevated Objects and Text
    - Adding Breaklines to a Surface
    - Adding Standard Breaklines to Surfaces
    - Adding Walls to a Surface
    - Adding Boundaries to a Surface
    - Editing Surfaces
    - Working with Surface Operations
    - Creating a Finished Ground Surface by Pasting a Surface
    - Finishing the Pasted Surface
    - Lowering and Raising a Surface
    - Performing a Slope Analysis
    - Using the Inquiry Tool on a Surface
    - Extracting Objects from a Surface
    - Creating a Water Drop Path Along a Surface
    - Creating Storm Water Catchment Areas
    - Calculating Surface Volumes
    - Creating Earthwork Construction Plans
    - Deleting an Earthwork Construction Plan
    - Creating an Expression for Use with a Block in a Label
    - Understanding Point Clouds
    - Creating Point Clouds
    - Creating a 3D Solid from a Surface and Exporting it to IFC
    - Creating a Volume Label
    - Labeling a Volume Surface
    - Applying Object Styles to a Point Cloud
    - Configuring Point Cloud Objects
- **Sharing Data**
    - Sharing Data within Civil 3D
    - Creating Data Shortcuts
    - Using Data Shortcuts
    - Labeling an Object Through an Xref
    - Managing and Editing Data Shortcuts
    - Understanding the Data Shortcut Editor

    - Importing Data from InfraWorks 360
    - Exporting Data to InfraWorks and InfraWorks 360
- **Working with Alignments**
    - Understanding Alignments
    - Understanding Sites
    - Creating Alignments from Objects
    - Working with Alignment Styles
    - Understanding and Working with Alignment Labels
    - Creating Alignments with the Layout Tools
    - Editing Alignments
    - Creating Offset Alignments and Widenings
    - Adjusting Alignment Stations
    - Working with Alignment Design Criteria
    - Adding Superelevations
    - Working with Alignment Tags and Tables
    - Adding Points to an Alignment
    - Creating an Alignment from a Pipe Network and Pressure Network
- **Working with Profiles**
    - Understanding Profiles
    - Working with Profile Views
    - Working with Profile View Styles
    - Creating Existing Ground Profiles
    - Creating a Proposed Ground Profile
    - Working with Profile Styles
    - Editing Profiles
    - Locking a Profile
    - Using Profile Design Criteria
    - Labeling Profiles and Profile Views
    - Working with Profile Tools
- **Assemblies & Subassemblies**
    - Understanding Assemblies
    - Understanding Subassemblies
    - Creating Assemblies
    - Working with Shape Styles
    - Creating Subassemblies from Polylines
    - Understanding Assembly Properties and Object Styles
    - Adding Subassemblies to an Assembly and Editing Them
    - Editing Assemblies
    - Creating a Code Set
    - Adding Labels to a Code Set
- **Designing Corridors**
    - Working with Corridors
    - Creating a Corridor
    - Adding a Baseline to a Corridor
    - Adding a Transition to a Corridor
    - Understanding Intersections
    - Creating an Intersection
    - Finishing the Corridor

    - Creating a Surface from a Corridor
    - Viewing Corridor Sections
    - Editing Corridor Sections
    - Extracting Feature Lines from a Corridor
    - Extracting Solids from a Corridor
    - Assigning Property Data Sets to Corridor Solids
    - Configuring Roundabout Tools Settings
    - Editing the Roundabout Library
    - Creating a Roundabout
    - Modifying a Roundabout
    - Adding a New Road to a Roundabout
    - Prepping for a Cul-de-Sac
    - Creating a Cul-de-Sac
    - Modifying a Cul-de-Sac
    - Creating a Corridor From a Feature Line
- **Grading**
    - Working with the Grading Tools
    - Using the Grading Creation Tools to Create a Building Pad
    - Using the Grading Volume Tools to Balance a Building Pad
    - Understanding Grading Styles
    - Using the Grading Creation Tools to Create a Detention Pond
    - Calculating the Detention Volume of a Pond
    - Understanding the Volumes Dashboard
    - Using Stage Storage to Calculate Volumes
- **Working with Sections**
    - Understanding Sections
    - Creating Sample Lines
    - Creating Section Views
    - Producing Sheets of Section Views
    - Setting Up Earthwork Quantity for Reports
    - Generating a Materials Quantity Report
    - Creating Earthwork Quantity and Volume Reports
    - Working with Mass Haul Diagrams
    - Creating a Mass Haul Diagram
    - Assigning Pay Items and Generating a Report
- **Working with Pipe Networks**
    - Understanding Pipe Networks
    - Working with Pipe Network Styles and Settings
    - Creating Pipe and Structure Rules
    - Creating a Parts List
    - Creating a Pipe Network Using Objects
    - Creating a Pipe Network Using the Creation Tools
    - Adding Pipes to a Network
    - Understanding the Pipe Network Vista
    - Editing a Pipe Network Structure
    - Modifying a Pipe Network Pipe
    - Swapping and Moving Pipe Network Parts
    - Splitting and Merging Pipe Networks

    - Creating Pipe Network Profiles
    - Modifying Pipe Profiles
    - Labeling Pipe Networks
    - Checking Pipe Interferences
    - Selecting the Part Catalog For Your Parts List
    - Understanding and Editing the Part Catalog
- **Working with Pressure Pipe Networks**
    - Understanding Pressure Pipe Networks
    - Creating a Pressure Pipe Network Parts List
    - Working with Pressure Pipe Network Styles and Settings
    - Creating a Pressure Pipe Network by Layout
    - Creating a Pressure Pipe Network Using Objects
    - Editing a Pressure Pipe Network Part
    - Creating Pressure Pipe Network Profiles
    - Modifying Pressure Pipe Network Profiles
    - Adding a Pressure Pipe Network to Section Views
    - Creating Pressure Pipe Network Tables
    - Labeling Pressure Pipe Networks
    - Creating a Connection Point on a 3D Solid
    - Creating a Content File from a 3D Solid
    - Importing a Content File into the Pressure Parts Catalog
    - Adding a Pipe to the Pressure Parts Catalog
- **Working with Plan Production Tools**
    - Working with the Plan Production Tools
    - Creating View Frames
    - Creating Construction Documents or Sheets
    - Understanding the Sheet Set Manager
    - Creating a Sheet Set
    - Repathing a Lost Sheet File in a Sheet Set
    - Creating Custom Fields for a Sheet Set
    - Editing Custom Sheet Properties
    - Creating a Template for Sheets
    - Adding Callout and Label View Blocks to a Template
    - Adding Views and Callouts Using Sheet Set Manager
    - Creating a Page Setup Overrides Template
    - Mapping the Page Setup Override File in a Sheet Set
    - Creating and Moving Subsets
    - Creating New Sheets in a Sheet Set
    - Renaming and Renumbering a Sheet
    - Removing a Sheet from a Sheet Set
    - Importing a Sheet into a Sheet Set
    - Creating a Drawing Index from a Sheet Set
- **Rendering**
    - Adding Rendering Materials to Corridors
    - Adding Render Materials to Surfaces
    - Adding Multi-View Blocks
    - Creating an Animation