CADLearning for AutoCAD Architecture 2014

Course Details

- 19+ hours of training
- 325 video tutorials
- Exercise files included
- Instructor: Reid Addis

Course Description

CADLearning® for AutoCAD® Architecture 2014 teaches you to create a building design from scratch and work with 2D and 3D models. Lessons cover basic and advanced topics including building geometry, finding and using content, using conceptual design tools, creating building interiors, organizing projects, and graphic presentation and visualization.

Lesson Outline

Introducing AutoCAD Architecture

- Installing AutoCAD Architecture
- Launching the Application for the First Time
- Introducing the AutoCAD Architecture Interface
- Introducing the Application Menu
- Understanding the Ribbon, Quick Access Toolbar and InfoCenter
- Understanding Terminology and Using the Helper Tools
- Understanding Status Bars
- Introducing the Display System
- Managing Layers
- Understanding the Differences between Color-Based and Style-Based Template Files
- Displaying Objects and Their Materials
- Introducing the Project Navigator
- Identifying Options Unique to AutoCAD Architecture
- Using Autodesk Exchange for AutoCAD Architecture
- Changing the Product Serial Number and Activating a Trial Version

Quick Start

- Introducing Quick Start
- Creating a Small Building
- Creating a Building Mass for Our New Project
- Creating the Exterior Shell
- Creating the Ground Floor
- Creating the Column Grid
- Creating the Core
- Creating Views
- Creating Plan and Elevation Sheet Files
- Creating Section and Enlarged Plan Sheet Files

Productivity Tools

- Introducing Productivity Tools
- Configuring Your Personal Workspace
- Learning to Use Dynamic Input
- Using Right-Click Menus
- Using Grips in Plan Views
- Using Grips in Elevation and Isometric Views
- Editing AEC Objects from Alternate Views
- Editing Objects in Place
- Isolating Objects to Simplify Views
- Using Live Sections

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- Navigating in 3D
- Using Object Viewer
- Creating User-Defined Palettes and Tools

Finding and Using Content

- Introducing Content
- Using AutoCAD Architecture Templates
- Using Task-Based Palettes
- Using Design Center
- Using Content Browser
- Using the Properties Palette
- Using Style Manager
- Using Display Manager
- Using Autodesk Seek

Using the Conceptual Design Tools

- Introducing the Conceptual Design Tools
- Massing Studies
- Using Mass Groups and Slices
- Understanding Space Planning
- Analyzing Designs
- Moving the Design Forward

Creating Building Interiors with Basic Components

- Introducing Building Interior Basic Components
- Creating Walls Accurately
- Understanding Wall Justification
- Understanding Wall Justification with Object Snaps
- Changing Wall Justification
- Using Wall Cleanup Tools
- Using AutoCAD Modify Commands
- Understanding Wall Cleanup Radius
- Understanding Wall Component Priorities
- Overriding Wall Component Priorities
- Understanding Wall Cleanup Groups
- Understanding Wall Location Elevations
- Adjusting Wall Justification
- Using the Wall Offset Tools
- Using AEC Modify Tools to Trim and Extend Walls
- Modifying Wall Style Assignments
- Adding and Modifying Interior Walls
- Converting Linework to Walls
- Using Renovation Mode to Create Phased Wall Styles
- Using Wall Styles to Create Phased Projects
- Creating Interior Walls
- Using Constraints with Walls
- Using Advanced Wall Tools
- Creating Wall Interference Conditions
- Creating Doors
- Modifying Doors
- Creating Windows
- Modifying Windows
- Creating and Modifying Wall Openings
- Using Content Browser for Window and Door Styles
- Placing Multiple Doors and Windows
- Creating Doors and Windows
- Creating Straight Run Stairs
- Creating U-Shaped and Multi-Landing Stairs
- Creating Spiral Stairs
- Creating Custom Stairs
- Modifying Stairs
- Creating Ramps
- Creating Railings
- Modifying Railings
- Adding Stairs and Railings

Creating Boundary Components for Building Interiors

- Understanding Building Interior Boundary Components
- Creating Spaces
- Generating Spaces Automatically
- Modifying Spaces
- Dividing Spaces
- Creating Spaces in Our Project
- Calculating Room Quantities
- Configuring Roombook Calculation Settings
- Generating Roombook Schedules
- Creating Slabs
- Modifying Slabs
- Applying Edge Styles to Slabs
- Creating a Stair and Slab Interference Condition
- Creating Project Slabs
- Creating Ceiling Grids
- Modifying Ceiling Grids

- Defining the Ceiling Properties of Spaces
- Understanding Ceiling Materials
- Creating Ceilings in Our Project

Structural Components

- Introducing Structural Components
- Creating Rectangular Column Grids
- Creating Radial Column Grids
- Modifying Column Grids
- Annotating Column Grids
- Adding Columns to a Column Grid
- Creating Irregular Column Grids
- Using the Enhanced Custom Grid tool
- Understanding Structural Members and the Display System
- Creating Column Grids
- Exploring the Structural Member Catalog
- Accessing Structural Styles from Content Browser
- Utilizing the Structural Member Wizard
- Creating Custom Columns
- Adding and Modifying Columns
- Adding Beams
- Modifying Beams
- Adding Beam Layouts
- Creating Structure
- Representing Bracing

Building Exterior Components

- Introducing Building Exterior Components
- Creating Curtain Walls
- Modifying Curtain Walls
- Converting Other Objects into Curtain Walls
- Creating Curtain Walls in Our Project
- Editing Curtain Walls in Place
- Creating Door and Window Assemblies
- Modifying Door and Window Assemblies
- Converting Other Objects to Door and Window Assemblies
- Creating Door and Window Assemblies in Our Project
- Creating Roofs
- Modifying Roofs with Grips
- Modifying Roof Properties
- Creating Roof Slabs
- Converting Other Objects to Roof Slabs and Adding Holes
- Applying Edge Styles to Roof Slabs
- Varying Roof Plate Heights
- Trimming and Mitering Roof Edges
- Adding a Dormer Roof
- Creating the Roof in Our Project

Understanding Building Components

- Reviewing Building Components Styles
- Configuring Wall Styles
- Configuring Door Styles
- Configuring Window Styles
- Creating Stair Styles
- Changing Railing Styles
- Understanding Space Styles
- Configuring Slab Styles
- Changing Slab Edge Styles
- Configuring Curtain Wall Styles
- Editing Door and Window Assembly Styles
- Setting Roof Slab Styles
- Editing Section and Elevation Styles

Adding Components

- Introducing Components
- Understanding and Using Multi-View Blocks
- Finding Multi-View Block Content
- Placing Multi-View Blocks
- Placing Multi-View Blocks Accurately
- Using Layout Curves and Anchors with Multi-View Blocks
- Adding Fixtures to Ceiling Objects
- Representing Soffits with Wall Objects
- Creating and Using Object Profiles
- Adding Components to Our Model

Working with Sections and Elevations

- Introducing Sections and Elevations
- Assembling the Building Model
- Setting Your Building on a Site
- Creating Elevations
- Modifying Elevations
- Creating Sections from the Section and Elevation Panel

- Creating Sections from the Callouts Palette
- Modifying Sections
- Updating Changes to Sections and Elevations
- Adding Visual Depth to Sections and Elevations
- Using Components and Design Rules with Sections and Elevations
- Working with Materials with Sections and Elevations
- Creating Sections and Elevations from Our Model

Annotating Drawings

- Introducing Annotation
- Using the Annotation Edit Scale List
- Configuring Settings for Annotation
- Understanding Annotation Scale with AEC Objects
- Scaling Wall Hatch Patterns
- Coordinating Annotation Scale within Viewports
- Placing Text
- Placing Multileaders
- Setting Default Behavior for MText and Multileaders
- Using Layer Key Overrides
- Modifying Layer Key Overrides
- Placing AEC Dimensions and AEC Dimension Styles
- Modifying AEC Dimensions
- Using Additional Dimensioning Tools
- Creating Callouts for Annotation Only
- Applying Tags to Doors and Windows
- Applying Tags to Walls
- Applying Room Tags to Spaces
- Applying Tags to Objects
- Applying Labels to Column Grids
- Creating Schedules
- Modifying Schedules
- Using Schedules to Find Items in Your Project
- Using Schedule Grouping and Subtotaling
- Placing Keynotes
- Understanding Sheet versus Reference Keynotes
- Modifying Keynotes
- Placing Keynote Legends
- Placing Annotation

Detailing

- Introducing Detailing
- Creating a Detail View Using Callouts
- Using the Detail Component Manager
- Adding Detail Components
- Modifying Details
- Using AEC Modify Tools
- Annotating a Detail

Understanding the Display System

- Introducing the Display System
- Using the Display Manager
- Modifying Drawing Default Display Representations
- Modifying Style Display Representations
- Modifying Object Display Representations
- Understanding the Properties Palette Display Tab
- Understanding Display Sets
- Understanding Display Configurations
- Controlling the Display of Multi-View Blocks
- Using Materials to Affect Display Representations

Using AutoCAD Architecture Layer Tools

- Understanding the Layer Tools
- Managing Layers
- Understanding Layer Standards
- Understanding Layer Key Styles
- Creating Layer Filters
- Configuring Layer States
- Loading Layer Key Styles
- Creating a Layer Standard

Using Layout Design Objects

- Introducing Layout Design Objects
- Using AEC Modify Tools
- Using Layout Grids
- Using Layout Curves
- Using Anchors

Organizing Projects with the Drawing Management System

- Introducing Project Organization with the Drawing Management System
- Exploring the Project Browser and the Project Navigator
- Using the Project Browser

- Reviewing Options for AEC Project Defaults
- Creating a New Project
- Understanding Project Navigator
- Using the Project Tab of Project Navigator
- Using the Remaining Tabs of Project Navigator
- Adding Existing Drawings to Project Navigator
- Creating Constructs from Objects in Existing Drawings
- Creating Constructs from Other Constructs
- Creating Elements
- Creating Plan Views
- Creating Elevation Views
- Creating Section Views
- Annotating Views
- Creating Schedule Views
- Managing Sheet Set Properties
- Creating Sheet Subsets
- Creating Sheets
- Creating Named Model Space Views and Linking to Sheets
- Using Callouts to Create Named Model Space Views and Linking to Sheets
- Inserting a Sheet List Table
- Enabling and Configuring Project Standards
- Synchronizing Drawings and Projects
- Generating Reports

Publishing from the Project Navigator

- Introducing Publishing from the Project Navigator
- Publishing Your Project
- Publishing with Subsets
- Publishing Sheet Selections
- Publishing with Overrides

Creating Custom Styles and Components

- Introducing Creating Custom Styles and Components
- Editing Wall Styles
- Creating Walls Using the Walls Style Browser
- Understanding Wall Endcaps
- Endcap Styles for Wall Openings
- Editing In-Place Wall and Wall Opening Endcaps
- Configuring Design Rules for Door and Window Styles
- Adjusting Dimensions for Door and Window Styles
- Creating Custom Shapes for Door and Window Styles
- Adding Muntins to Door and Window Styles
- Examining Design Rules and Terminology for Door-Window Assemblies and Curtain Walls
- Examining Nested Grids in Curtain Walls
- Creating a Custom Door-Window Assembly
- Modifying Frames and Mullions in a Door-Window Assembly
- Creating a Custom Curtain Wall Unit
- Creating a Custom Curtain Wall
- Creating Style Overrides for Door-Window Assemblies and Curtain Walls
- Creating a Custom Curtain Wall in Our Project
- Creating Components for a Multi-View Block
- Assigning Component Visibility to Multi-View Blocks
- Scaling Annotation for Multi-View Blocks

Graphic Presentation and Visualization

- Introducing Graphic Presentation and Visualization
- Exploring Visual Styles
- Adding a Camera
- Slicing the Model
- Using Napkin Sketch
- Using Display Themes
- Rendering with AutoCAD Architecture
- Defining Sun and Location Settings
- Adding Lights
- Adding a Camera and a Background
- Rendering Settings
- Using Materials on AEC Objects
- Fine-Tuning Curved Objects
- Utilizing the Vision Tools

Working with Others

- Introducing Working with Others
- Importing Geometry and Data from Other Programs
- Exporting Geometry and Data

- Sharing Documents Using Autodesk 360
- Collaborating Using Autodesk 360 and AutoCAD WS

Troubleshooting

- Introducing Troubleshooting
- Cleaning Up Walls
- Understanding the Question Marks in My Schedule
- Restoring Panels and Tabs to the Ribbon
- Restoring Hidden Messages and Tooltips
- Understanding Why Objects from the Tool Palettes Cannot Be Placed

System Requirements

DVD Version Requires

- Microsoft Windows® XP, Vista, 7
- 512 MB Ram
- 1GHz Processor or faster
- 1024x768 color display
- Sound Card and Speakers
- Up to 8GB hard disk space required for installation
- DVD-ROM drive for install only Mouse (or pointing device) needed for navigation

Online Version Requires:

- Internet Browser
- Adobe® Flash Plugin
- InternetConnection (High-Speed Recommended)

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About CADLearning

CADLearning delivers instruction through e-books, self-paced video tutorials, exercise files and assessments that are designed to improve familiarity and fluency with leading CAD and BIM software programs. Professionals in architecture, engineering, construction, automotive and transportation, manufacturing, utilities, communication, government and education can effectively leverage CADLearning for self-paced learning, as an ongoing resource, and as a help tool. CADLearning is developed by 4D Technologies, LLC.

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