

AutoCAD Revit LT 2016

392 lessons : 38:45:20 (hh:mm:ss)

Description:

CADLearning for Autodesk Revit LT 2016 covers the use of Revit LT 2016 as an architectural modeling tool. Revit LT is a perfect architectural tool for designing residential and small commercial projects. Beginner users will learn the core functions of the program as it functions within the world of Building Information Modeling, or BIM. Another benefit of using Revit LT is that it allows designers to work on projects that were created using Revit.

- **Getting Started**

- Starting Revit
- Opening a Project File
- Identifying the User Interface Components
- Managing User Interface Components
- Understanding the Ribbon
- Customizing the User Interface
- Understanding the Quick Access Toolbar
- Understanding the Options Bar
- Understanding the Application Menu
- Understanding the InfoCenter Toolbar
- Understanding the Project Browser
- Understanding the Properties Palette
- Understanding the Type Selector
- Understanding the Status Bar
- Understanding the Drawing Area
- Understanding the View Controls
- Understanding the Navigation Bar
- Understanding the ViewCube
- Understanding the Steering Wheels
- Understanding the Options Dialog
- Managing File and Template Locations
- Starting a New Project from Recent Files
- Starting a New Project from the Application Menu
- Understanding Units and Snaps
- Using the Mouse
- Using the Keyboard
- Customizing Keyboard Shortcuts
- Managing Windows
- Saving and Closing Files
- Closing the Application

- **Revit Fundamentals**

- Understanding BIM
- Understanding the Difference Between BIM and CAD
- Understanding Revit Concepts
- Understanding Bidirectional Associativity
- Recognizing Parametric Relationships

- Understanding Families
- Placing Model Elements
- Sketching Model Elements
- Placing View-Specific Elements
- Working with Datum Elements
- Placing Elements from the Project Browser
- Loading Families and Using Type Catalogs
- Finding Families Using Autodesk Seek
- Editing Families Within a Project
- **Basic Modify and Reporting Tools**
 - Selecting Objects
 - Modifying Selection Settings
 - Copying and Moving Objects
 - Rotating Objects
 - Creating Linear Arrays
 - Creating Radial Arrays
 - Scaling Objects
 - Mirroring Objects
 - Using the Clipboard for Copy and Paste
 - Splitting Objects
 - Creating Elements Consistently with Match Type Properties and Create Similar
 - Aligning Objects
 - Trimming and Extending Objects
 - Offsetting Objects
 - Pinning Objects in Place
 - Deleting Objects
 - Cutting and Joining Geometry
 - Splitting the Face of an Element
 - Applying Materials as Paint
 - Measuring versus Dimensioning Objects
 - Understanding Element IDs
 - Understanding and Reviewing Warning Messages
- **Modeling Essentials**
 - Creating and Modifying Levels
 - Creating and Modifying Grids
 - Creating and Modifying Multi-Segment Grids
 - Controlling Datum Visibility
 - Limiting Visibility of Datum Using Scope Boxes
 - Setting and Showing the Active Work Plane
 - Creating Reference Planes
 - Modeling Accurately with Length and Angle Snap Increments
 - Working with Object Snaps
 - Using Visualization Aids When Working in 3D Views
- **Core and Shell**
 - Understanding Wall Drawing Aids
 - Creating Exterior Building Walls
 - Creating Building Core Walls
 - Creating Doors

- Creating Windows
- Modifying Door and Window Properties
- Creating Curtain Walls
- Placing Doors in Curtain Walls
- Creating Curtain Wall Grids and Mullions
- Understanding Compound Structures
- Creating Floors
- Understanding Floor Instance Properties
- Understanding Floor Type Properties
- Creating Sloped Floors by Sketching
- Creating Floor Openings
- Creating Shaft Openings
- Creating a Roof by Footprint
- Creating a Roof by Extrusion
- Joining and Unjoining Roofs
- Understanding Roof Instance Properties
- Understanding Roof Type Properties
- Working with Sloped Glazing Roofs
- Creating Sloped Roofs by Sketching
- Creating Conical Roofs
- Managing Complex Roof Conditions Using Align Eaves
- Creating Roof Soffits
- Creating Fascias
- Creating Dormer Openings
- Creating Roof Openings
- Modifying Roof and Wall Joins and Controlling Roof Visibility
- Creating Gutters and Downspouts
- **Walls - An In-Depth Look**
 - Understanding Wall System Families and Types
 - Creating Walls by Picking Lines
 - Understanding Wall Instance Properties
 - Understanding Wall Type Properties
 - Changing the Wall Type as Your Design Evolves
 - Understanding Curtain Wall Types
 - Selecting Curtain Wall Components
 - Working with Curtain Wall Grids
 - Creating a Curved Curtain Wall
 - Embedding a Curtain Wall in Another Wall
 - Working with Curtain Wall Panels
 - Understanding Mullion Families
 - Modifying Mullion Join Conditions
 - Working with Corner Mullions
 - Modifying Curtain Wall Corner Conditions
 - Customizing Curtain Wall Mullions
 - Creating a Stacked Wall
 - Creating Walls Using the Modify Tools
 - Modifying Wall Profiles
 - Creating Wall Openings

- Introducing Wall Layer Functions
- Overriding Host Layer Display
- Understanding Wall Join Cleanups
- Understanding Wall Layer Wrapping
- Customizing Vertical Wall Structure by Splitting Regions
- Customizing Vertical Wall Structure by Adding Sweeps
- Customizing Vertical Wall Structure by Adding Reveals
- Customizing the Base and Top Extension of Walls
- Creating Embedded Walls
- Creating In-Place Wall Sweeps
- Creating In-Place Reveals
- **Building Structure**
 - Managing Structural Symbolic Representation Settings
 - Creating Structural Columns
 - Creating Isolated Foundations
 - Creating Wall Foundations
 - Creating Stepped Foundations
 - Creating Structural Floors
 - Creating Beams
 - Creating Beams on Grids
 - Creating Structural Walls
 - Creating Structural Braces
- **Stairs and Railings**
 - Creating Stairs
 - Creating Landing Components
 - Creating Support Components
 - Creating Stair Components by Sketching
 - Modifying Stair Components
 - Tagging Stairs
 - Customizing Stair Documentation
 - Understanding Stair by Component Properties
 - Creating Spiral Stairs
 - Creating Multi-Story Stairs and Shafts
 - Creating Ramps
 - Placing Railings on a Host
 - Creating Railings by Sketch
 - Modifying Railings
 - Understanding Railing Properties
 - Customizing Railing Properties
- **Building Interiors**
 - Creating Interior Partitions
 - Creating Interior Storefront Glazing
 - Placing Rooms
 - Placing Rooms Automatically
 - Creating Room Separation Lines
 - Managing Area and Volume Computation Settings
 - Placing Components
 - Placing Hosted Components

- Creating Architectural Columns
- Creating Ceilings
- Placing Building Components in Ceilings
- Creating Area Plans
- Creating Area Boundary Lines
- Creating Areas and Area Schedules
- Creating and Managing Color Schemes
- **Site Tools**
 - Creating a Toposurface Using Points
 - Creating a Toposurface from CAD
 - Creating a Toposurface from a Points File
 - Managing Site Settings
 - Controlling the Display of Contour Lines
 - Splitting and Merging Surfaces
 - Creating Toposurface Subregions
 - Creating a Building Pad
 - Creating a Graded Region
 - Creating Site and Parking Components
 - Creating Property Lines
 - Adding Property Line Tags and Contour Labels
- **Schedules and Tags**
 - Understanding Parameters
 - Creating Project Parameters
 - Creating Shared Parameters
 - Understanding Schedules and Tags
 - Placing Element Tags
 - Placing Room and Area Tags
 - Working with Material Tags
 - Creating a Schedule and Specifying Fields
 - Modifying Schedules with Filters
 - Modifying Schedules with Sorting and Grouping
 - Modifying the Formatting of Schedule Titles and Headers
 - Modifying Schedule Formatting
 - Modifying the Schedule Appearance
 - Creating Schedule View Templates
 - Placing Schedules on a Sheet
 - Working with Room and Area Schedules
 - Working with Key Schedules
 - Working with Calculated Values and Conditional Formatting in Schedules
 - Creating and Managing a View List
 - Working with Material Takeoff Schedules
- **Annotation**
 - Working with Text Annotations
 - Using Keyboard Controls to Add Symbols to Text
 - Checking Spelling in a View
 - Finding and Replacing Text
 - Modifying Text Type Properties
 - Specifying Keynoting Settings

- Creating Keynotes
- Modifying Keynotes and Keynote Settings
- Creating a Keynote Legend
- Working with Symbols and Note Blocks
- Working with Legends
- Managing Arrowheads
- **Dimensions and Constraints**
 - Using Temporary Dimensions
 - Modifying Temporary Dimension Settings
 - Working with Permanent Dimensions
 - Modifying Dimensions
 - Modifying Dimension Graphics
 - Modifying Dimension Text Appearance
 - Creating and Modifying Dimension Styles
 - Locking Dimensions
 - Controlling Dimensions Using Equality Constraints
 - Creating and Revealing Constraints
 - Controlling Dimension Units
 - Dimensioning Entire Walls
 - Working with Spot Elevations
 - Working with Spot Coordinates
 - Working with Spot Slopes
- **Drafting and Detailing**
 - Loading and Placing Detail Components
 - Placing Repeating Details
 - Creating a Repeating Detail
 - Creating Detail Lines
 - Specifying Draw Order
 - Showing Hidden Lines in a Detail View
 - Modifying the Cut Profile of Model Elements
 - Overriding Linework in a View
 - Creating Filled Regions
 - Creating Masking Regions
 - Creating Batt Insulation
 - Placing Annotations in Detail Views
 - Leveraging Detail Groups
 - Saving Views to a File
 - Inserting Views and 2D Elements from a File
 - Creating Model Text and Model Lines
- **View Graphics**
 - Understanding Scale and Detail Level
 - Understanding Plan View Range
 - Understanding View Discipline
 - Understanding View Templates
 - Creating View Templates
 - Applying and Assigning View Templates
 - Creating View Types
 - Understanding Object Styles

- Understanding Visibility and Graphic Overrides
- Creating Element and Category Overrides in a View
- Using Temporary Hide or Isolate and Viewing Hidden Elements
- Using Temporary View Properties
- Understanding Crop Regions
- Creating a Non-Rectangular Crop Region
- Understanding Annotation Crop Regions
- Configuring System Family Coarse Scale Cut Patterns
- Understanding Graphics Mode Options
- Understanding Saved View Conditions
- **Views and Sheets**
 - Creating Plan Views and Reflected Ceiling Plan Views
 - Creating a Plan Region
 - Creating Building Elevation Views
 - Creating Interior Elevation Views
 - Changing the Elevation Symbol
 - Creating Section Views
 - Segmenting Section and Elevation Views
 - Creating Callout Views
 - Sketching a Callout View
 - Creating Drafting Views
 - Creating a Reference View
 - Duplicating Views
 - Creating Matchlines and View References
 - Creating Additional View References
 - Creating and Using Sheets
 - Working with Viewports on Sheets
 - Aligning Views on Sheets with a Guide Grid
 - Using a Sheet List and Placeholder Sheets
 - Creating Custom Titleblocks
 - Creating a Key Plan
 - Managing Sheet Issues and Revisions
 - Creating Revision Clouds and Tags
 - Adding a Revision Schedule to a Titleblock
 - Creating Supplemental Drawings
- **Printing**
 - Introducing Printing in Revit
 - Printing and Managing Print Settings
 - Printing to PDF
- **Managing Projects**
 - Managing Project Information
 - Understanding Coordinate Systems
 - Working with Coordinate Systems
 - Relocating a Project
 - Rotating True North
 - Rotating Project North
- **Managing Settings**
 - Understanding Model and Drafting Patterns

- Managing Fill Patterns
- Managing Materials and Material Libraries
- Managing Material Properties and Material Assets
- Managing Line Styles
- Managing Line Weights
- Managing Line Patterns
- Managing Halftone and Underlay Settings
- Assigning Assembly Code Files
- **Collaboration**
 - Linking Revit Models
 - Managing Linked Revit Models
 - Scheduling Elements from a Linked Model
 - Tagging Elements in a Linked Model
- **Groups**
 - Creating a Model Group
 - Creating and Managing Model Groups and Attached Detail Groups
 - Attaching Annotation Detail Groups
 - Editing Groups
 - Making Parameters Vary Between Groups
 - Excluding Elements from Groups
- **Phases**
 - Understanding Phases
 - Managing Phases
 - Understanding Phase Filters and Graphic Overrides
 - Assigning Phases and Phase Filters to a View
 - Understanding the Impact of Phases on Documentation
 - Demolishing Elements
 - Establishing Phases in Project Templates
- **Design Options**
 - Enabling Design Options
 - Working with Design Options and Option Sets
 - Editing Design Options
 - Duplicating and Deleting Design Options
 - Creating Design Option Views
 - Understanding the Impact of Design Options on Documentation
 - Promoting and Accepting Design Options
- **Family Creation**
 - Understanding Loadable Families
 - Introducing Family Creation
 - Understanding the Family Editor
 - Working with Tag Families
 - Creating a Custom Annotation Tag
 - Creating a Custom View Tag
 - Creating a Custom View Title
 - Working with Component Families
 - Introducing Form Creation
 - Creating Solid Extrusions and Blends
 - Creating Solid Revolves

- Creating Solid Sweeps and Swept Blends
- Creating Void Forms
- Creating Reference Planes and Reference Lines
- Creating Dimension and Parameter Constraints
- Creating Family Geometry
- Understanding Family Geometry Display Settings
- Creating Family Types
- Working with Families in a Project
- Working with Hosted Families
- Creating a Hosted Family
- Creating and Grouping Family Parameters
- Creating Shared Parameters
- Understanding Reporting Parameters
- Creating Symbolic and Model Lines
- Creating Controls
- Creating a Masking Region
- Creating Parameter Formulas
- Managing Nested Families
- Creating Linked Parameters
- Creating a Type Catalog
- **Presentation Views**
 - Creating 3D Views
 - Understanding 3D View Properties
 - Specifying the Background for a 3D View
 - Rotating a 3D View
 - Using Section Boxes in 3D Views
 - Using Selection Boxes
 - Creating a Perspective 3D View
 - Working in Perspective Views
 - Modifying the Perspective Field of View
 - Storing a 3D View Home and Front Orientation
 - Orienting 3D Views to Other Views
 - Locking 3D Views for Annotation
 - Creating an Exploded View
 - Using Sketchy Lines
 - Managing Photographic Exposure
 - Managing Shadows
- **Interoperability**
 - Importing and Managing Image Files
 - Linking and Importing CAD Files
 - Using CAD Files to Create Building Model Objects
 - Opening IFC Files
 - Linking IFC Files
 - Specifying CAD Export Setup Options
 - Exporting to 2D CAD Formats