



REVIT ARCHITECTURE

DURATION
45 Days

INTRODUCTION

- Building Information Modelling
- Revit Architecture
 - History
 - Features
 - Revit File Types
 - Exploring User Interface
 - Building Elements
 - Start a New Project

TO START A PROJECT

- Drawing Aids
- Project Units
- Levels
 - Adding Levels
 - Modifying Levels
 - Creating New Level Element Type
 - Constrain Level lines
 - Remove Constrains
 - Remove Level lines

DRAWING A PLAN AS PER DIMENSION

- Walls
- Location Line
- Creating Walls
 - Tips for Creating Wall
- Practice: Hands On

MORE IN DETAIL -WALL

- Compound Structure
- Wall joins
- Wall Layer Wrappings
- Vertically Compound Walls
- Layer Assignment Guide Lines
- Sweeps and Reveals
- Wall Shapes and Openings
- Stacked Wall
- Guidelines for Vertically Stacked Walls

CONSTRUCTION MODELLING TOOL

- Modelling Tool
- Parts
- oAssemblies
- Working with Grids
- Practice: Hands On

MODIFY TOOLS

- Move
- Copy
- Paste
- Create Similar
- Rotate
- Mirror
- Array
- Scale
- Split Element
- Trim
- Align
- Offset
- Pin
- Unpin
- Delete
- Door
- Window

- Match Type
- Tape Measure
- Keyboard Shortcuts
- Visual Styles
- Practice: Hands On

DIMENSIONS

- Temporary Dimensions
- Permanent Dimension
- Creating Custom Dimension Type
- Modify Dimensions
- Constrains

FLOOR

- Adding Floor
- Editing Floor Sketch
- Sloped Floor
- Floor Slab Edges

CEILING

- Creating Ceiling
- Practice: Hands On

ROOF

- Roof by Footprint
- Roof by Extrusion
- Shape editing for Floors and Roofs
- Join/Unjoin Roof/Roof Soffit
- Roof Fascia
- Roof Gutter

OPENING

- Opening on Face and Vertical opening
- Shaft Opening
- Wall Opening
- Dormer Opening
- Practice: Hands On

COMPONENTS

- Placing Component
- Rehosting
- Workplane based and Face based Placement
- Working with Modern Medium Library

MANAGING VIEWS

- Ceiling plan view
- View properties
- View Range
- Plan Region
- Elevation view
- Cut a view by Far Clip Plane
- Section View
- Creating Section head
- 3D views
- Cropping a View
- Visibility or Graphics Display
 - Specifying Element Category Visibility
 - Overriding Graphics Display of Element Category
 - Overriding Visibility and Graphics Display of Individual
 - ElementsView Templates
 - Filter
 - Practice: Hands On

CURTAIN WALL

- Creating Curtain Wall
- Curtain Grids
- Mullions
- Reshaping Curtain Wall Panels
- Merging Curtain Grids
- Adding Curtain Door Panel
- Embedded Walls

STAIRS

- Creating Stairs
- Creating Stair by sketching Runs
- Creating Stair by sketching Boundary and Riser
- Spiral Staircase
- Stair Calculator
- Specifying Railing Types for New Stairs
- Modifying Stair
- Ramp

RAILINGS

- Adding Railing
- Modifying Rail Structure
- Modifying Rail Joins
- Practice: Hands On

MASSING

- Terminology
- Create Mass Family using Forms
- Extrusion
- Loft
- Revolve
- Sweep
- Swept Blend
- Modifying Forms
- Dimensioning Forms
- Surface Forms
- Rationalizing Surface
- Surface Representations
- Surface Sub regions
- Paint Tool
- Placing Mass Instance from Mass Family
- Creating Building Elements from Mass Instance
- Mass Floors
- Creating Wall
- Creating Floors
- Creating Curtain System

- Creating Roof
- Updating Face- based Host Shapes

CONCEPTUAL ENERGY ANALYSIS

- Display Styles for analysis add-in applications
- Controlling Visibility of Mass Instances
- Practice: Hands On

RAILINGS

- Adding Railing
- Modifying Rail Structure
- Modifying Rail Joins
 - Text
 - Model Text
 - Tag
 - Callout Views
 - Detailing
 - Creating Detail View
 - Drafting View
 - Inserting Detail
 - Component
- Practice: Hands On
- Schedules
 - Schedule/ Quantities
 - Material Take Off
 - Annotation Schedule or Note Block
- Practice: Prepare Door and window schedule for Residential Building.rvt
- Rooms
- Schedule keys
- Area
- Color Schemes
- Legend Views
- Keynotes
- Practice: Find out the total area, Place rooms and prepare room schedule
- Structural Modelling

- Structural Column
- Beams
- Beam System
- Brace
- Trusses
- Opening in Structural Elements
- Structural Walls
- Foundations
- Structural Floor
- Sheets
- Title Blocks
- Adding Sheet
- Adding Views on Sheet
- Sheet list
- Printing
 - Print Setup
 - Print Preview
- Practice: Add sheet along with title block
- Prepare Approval Plan
- Lights
 - Adding Lighting Fixtures
 - Light Groups
 - Sun settings
 - Materials
 - Rendering
 - Walkthroughs
- Exporting Walkthrough
- Solar Studies
- Create Solar Study
- Export Solar Study
- Practice: Create realistic images for exterior and interior view
- Export walkthrough in .avi format
- Site Design

- Toposurfaces
- Subregion
- Split Surface
- Merge Surface
- Building Pad
- Graded Region
- Parking Components
- Site Components
- Contour line Labels
- Working with a Team
 - Worksharing Workflow
 - Worksets
 - Worksharing Display Modes
 - Starting a view
 - Working with Linked Models
- Link Revit Models
- Managing links
- Shared Positioning
- Using Point cloud files
- Design Options
- Project Phasing
- Creating Phases
- Phase Filter
- Export
 - Export to CAD format
 - Exporting to DWG or DXF
 - Exporting to DWF format
- Room and Area Reports
- Exporting to IFC
- Export to 3d's m
- Decals
- Transferring Project Standards
- Interference Check
- Customizing Project Settings

- Fill patterns
- Line Weight
- Line Patterns
- Line Styles
- Purge Unused
- Import/Link
- Group

FAMILY CREATION

- Introduction
- Creating 2D door Family
- Creating the Door panel Solid geometry

FAMILY CREATION

- Creating Swing Door Family
- Window Family creation
- Creating Swing Door Family

FAMILY CREATION

- Creating Arched Window
- Creating Furniture Family

FAMILY CREATION

- Staircase Customization
 - Stair Nosing
 - Custom Handrail
 - Custom Balusters

FAMILY CREATION WITH ADAPTIVE COMPONENTS

- Adaptive Components
- Creating Curtain Panel Pattern 1
- Curtain Panel Pattern 2
- Create Helix
- Grill Design
- Reporting Parameter
- Family enhancements