

Syllabus of Building Modeling Using Autodesk Revit

Day 1

- Download and Installation process
 - Revit File Download Process from a trusted website
 - Installation Process
- Introduction of **Revit: BIM modeling technology**
 - Getting started with interface
 - Understanding Models and Families

Day 2

- Starting a New Architectural Project
 - Selecting template to start a project
 - Customize Templates
 - Project Unit
 - Saving File
- Using navigation tools
 - Pan
 - Zoom
 - Selection
- Getting familiar with workspace
 - Interface Overview
 - Project Browser Overview
 - Properties Palette Overview

Day 2 & 3

- Understanding Datum Planes and Creating Standard Views
 - Working with Levels
 - Adding Levels
 - Modifying Level Parameters
 - Understanding Level “*Type Properties*”
 - Level “*Instance Properties*”
 - Controlling Visibility of Levels
 - Working with Grids
 - Creating Grids: *Using Draw Tools*
 - Modifying Grid Parameters
 - Understanding Grid “*Type Properties*”
 - Grid “*Instance Properties*”
 - Controlling Visibility of Grids

- Working with Reference Plane and Work Plane
 - Setting a Work plane
 - Controlling Visibility of Work planes
- Working with Project Views
 - Plan View
 - Elevation View
 - Section View

Day 4

- Creating Plans and Elevations
 - Adding Columns and Beams
 - Modifying Column and Beams Parameters
Adjusting “*Instance Properties*”
Adjusting “*Type Properties*”
 - Adding Architectural Walls
 - Modifying Wall Properties
 - Edit Wall Profile
 - Creating Wall Openings
 - Adding Wall Profile
- Understanding Revit Modify Tools and Draw Command (Model Line)
 - Move (MV)
 - Copy (CO)
 - Rotate (RO)
 - Array (AR)
 - Radial Array
 - Linear Array
 - Mirror
 - Mirror – Pick Axis (MM)
 - Mirror – Draw Axis (DM)
 - Align (AL)
 - Locking an Alignment
 - Split (SL)
 - Trim/Extend (TR)
 - Trim/Extend Single Element
 - Trim/Extend Multiple Element
 - Offset (OF)
 - Scale (RE)

➤ Using Basic Building Components I

- Adding Doors
- Adding Windows

Day 5 & 6

➤ Using Basic Building Components II - Modelling

- Creating Floors
- Adding Stairs
- Adding Railings
- Creating Roofs
- Creating Ceilings
- Adding Parapet
- Adding Reinforcement

Day 7

➤ Using Building Components III – Edit Tools

- Extrusion
- Sweep
- Revolve
- Working with Selection Box
- Grouping, Sorting and Filtering
- Retrieving Information about Elements

Day 8

➤ Adding Site Features

- Importing site from AutoCAD
- Working with Site Features
- Property Lines
- Adding Site Components
- Applying Material
- Creating a New Material

Day 9

➤ Adding Annotations and Dimensions

- Adding Tags
- Keynotes
- Creating Dimensions

Day 10

- Creating Families
 - Creating a Basic Family
 - Adding Reference Planes to a Family
 - Adding Dimensions and Parameters to a Family

Day 11

- Creating Project Details and Working with Schedule
 - Project Detailing
 - Adding Text Notes such as Room name
 - Creating Doors and Windows Schedule
 - Working with schedule and quantities

Day 12

- Presentation tools, Plotting and Managing Printing + Export, Import
 - Creating Drawing Sheets
 - Creating Duplicate Dependent Views (**Duplicate Views**)
 - Importing file
 - Exporting File

Day 13

- Creating 3D views and Rendering
 - Three Dimensional Views
 - Working with Materials such as painting
 - Rendering in Revit Architecture

Day 14 & 15

- Sample Design of Residential Building in Revit (Practice)