

**Pravara Rural Education Society's  
Pravara Rural College Of Architecture, Loni**

# **Revit Architecture Course**

Total Duration: 45 Hours

## **Introduction**

The leap into three dimensions requires many changes in thinking and drawing habits for those who are used to 2D drawing. This course introduces to the concepts and methods of 3D modeling in Autodesk Revit Architecture. The course gives a thorough grounding in 3D fundamentals and explores the main features of Autodesk Revit's 3D environment.

## **Objective**

- To enhance the computing skills of the students
- 3d modeling
- 2d drawing

## **Course syllabus:-**

### **Module 1: Introduction**

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

### **Module 2: 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

### **Module 3: 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 Modeling Tool
- Parts
- Assemblies
- Working with Grids
- Practice: Hands On

#### **Module 4: 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

#### **Module 5: Dimensions**

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

#### **Module 6: Floor**

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

### **Module 7: Ceiling**

- Creating Ceiling
- Practice: Hands On

### **Module 8: 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

### **Module 9: Components**

- Placing Component
- Rehosting
- Work plane based and Face based Placement
- Working with Modern Medium Library
- Managing Views
- Floor plan views
- Ceiling plan view
- View properties
- View Range
- Plan Region
- Elevation view
- Cut a view by Far Clip Plane
- Section View
- Creating Section head

### **Module 10: 3D views**

- Cropping a View
- Visibility or Graphics Display
- Specifying Element Category Visibility
- Overriding Graphics Display of Element
- Category
- Overriding Visibility and Graphics Display
- Individual Elements
- View Templates
- Filter

- Practice: Hands On

## **Module 11: Curtain wall**

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

## **Module 12: 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

Text

Model Text

Tag

Callout Views

Detailing

Creating Detail View

Drafting View

Inserting Detail Component

## **Module 13: Printing**

- Print Setup Print Preview
- Practice: Add sheet along with title block
- Prepare Approval Plan