

### **REVIT ARCHITECTURE ADVANCE TRAINING**

# **Objectives**

After completing this guide, you will be able to:

- ✓ Import and export data between AutoCAD® and AutoCAD® Architecture and Revit® Structure projects.
- ✓ Link Revit models, coordinate and monitor changes in a current project and a linked project, and check and Fix interference conditions in Revit projects.
- ✓ Work with Conceptual Design Tools, Mass object and Adaptive Curtain Panel
- ✓ Create Topographic elements
- ✓ Work with Revit Materials for Revit Projects and Families
- ✓ Create, use, and manage worksheets.
- ✓ Work with Revit Rendering tools with Autodesk 360 Cloud Rendering solution

# **Pre-requisites**

This course is designed for existing Revit Architecture users.

It is recommended that you have:

- Basic architecture and design skills.
- Basic Revit Architecture skills.
- Completed all of the Revit Architecture Essentials course module.
- A working knowledge of Microsoft® Windows® 7, Microsoft® Windows® 8 or Microsoft® Windows® 10.

# TRAINING PROGRAMME DAY 1

## **Chapter 1: Importing and Exporting Files**

- About Importing Vector Data
- About Importing 3D Solids and Google SketchUp Files.
- Positioning and Scaling Options
- Importing Raster Data
- Guidelines for Importing and Using External Files
- About Exporting
- Guidelines for Exporting

### **Chapter 2: Collaborative Project**

- About Linked Projects
- Managing Shared Coordinates
- About Linked Locations. Acquiring and Reporting Shared Coordinates.
- Guidelines for Working with Linked Projects
- About Project Collaboration
- Guidelines for Monitoring and Coordinating Linked Projects

## **Chapter 3: Conceptual Design**

- About Massing
- Working with Massing
- Guidelines for Working with Massing.
- Mass Family
- In Place Mass
- Converting Massing Shapes to Building Components.
- Guidelines for Converting Massing Shapes to Building Components Grid and Snap
- Ortho and Polar Snapping
- Polar Snap
- Running Object Snaps
- Object Snap Tracking

# TRAINING PROGRAMME DAY 2

## **Chapter 4: Creating Advanced Components**

- About In-Place Families
- About Solids and Voids
- Creating 3D Geometry.
- Modifying In-Place Families
- Guidelines for Creating and Modifying In-Place Families
- About Families.
- About Component Families
- About the Family Editor.
- About Parametric Formulas
- Process of Creating Standard Component Families
- Guidelines for Creating Modifying Component Families
- About Nested Families.
- About Linked Parameters
- Guidelines for Creating Nested Families.
- About Component Groups
- Placing, Saving, and Converting Component Groups
- Duplicating and Editing Component Groups
- Guidelines for Working with Component Groups

## **Chapter 5: Adaptive Components**

- About adaptive component
- Creating Adaptive Curtain Panels
- Elements of Adaptive Panels
- About Pattern
- About Points
- Creating Form with Points and Lines
- About Adaptive Points
- Creating Adaptive component
- Loading Adaptive component to Mass Family and Project

#### **Chapter 6: Design and Analysis**

- About Phases
- Guidelines for Creating and Using Phases
- About Design Options
- Properties of Design Options
- Working with Design Option Sets Guidelines for Using Design Options
- About Interference Checks
- Guidelines for Checking and Fixing Interference Conditions
- About Area Plan
- Creating Area Plan

### **Chapter 7: Revit Architecture Worksharing**

- Overview
- Process of Project Sharing
- About Worksets
- About the Central File Moving the Central File
- Guidelines for Sharing Projects Using Worksets
- Overview
- About Local Files
- About Editable Worksets
- Worksets Dialog Box
- Process of Removing Users from a Workset
- Using Local Files
- Guidelines for Using Local Files Remotely.

### **Chapter 8: Working with Professionals**

- Overview
- About Toposurfaces
- Creating Toposurfaces
- Site Tools
- Creating Property Lines
- Site Components
- Guidelines for Working on a Site Design

## **Chapter 9: Advanced Rendering Techniques**

- About Materials and Render Appearances
- Process of Using Material Styles
- Editing Render Appearances
- Guidelines for Using Material Styles
- About Non-building Components.
- About Lighting
- About Lights Group
- About Materials
- Editing Materials
- About Render Quality Settings
- Process of Specifying Settings for Rendering Interior Views
- Guidelines for Rendering Interior Views
- About Cloud Base Rendering
- Process of Rendering through Autodesk 360