AUTODESK REVIT STRUCTURE ADVANCE

Objectives

The main objective of this course is to teach trainee the advance commands and tools for producing a detailed and specific structural model by using Revit as part of the Building Information Modelling process. After completing this course, trainee will be able to:

- ✓ Create 2D detail components, work with detail groups, and manage a library of typical details.
- ✓ Add 3D rebar to beams and columns and add area and path reinforcements to walls and slabs.
- ✓ Create a slab on metal deck, create a precast hollow core slab for a project, create a 3D steel gusset plate, and add steel stiffeners in a structural model.
- ✓ Work with bar joist and truss families.
- ✓ Link Revit models, coordinate and monitor changes in a current project and a linked project, and check and fix interference conditions in Revit Structure projects.
- ✓ Create, use, and manage worksets.

Training Programme Day 1

Chapter	Topic	Duration	Time
Chapter 1	**Creating Advance 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 • Overview Tapered Beam • About Tapered Beam • Process of Creating Tapered Beam • Guidelines for Creating Tapered Beam • Overview Hollow Core Slab • About Hollow Core Slab • Process of Creating hollow Core Slab	4 -Hour	9.00 AM - 1.00 PM

Chapter	Topic	Duration	Time
	• Guidelines for Creating Hollow Core Slab • Overview Column with Corbel • About Column with Corbel • Guidelines for Creating Column with Corbel		
Chapter 2	**Creating Trusses** • Overview. • About Bar Joist Families • Process of Modifying Bar Joist Families • Guidelines for Modifying Bar Joist Families • Overview • About Trusses • Process of Creating Truss Families • Process of Attaching Trusses to Roofs • Guidelines for Working with Trusses	**2-Hour**	**2.00 PM- 4.00 PM**
Chapter 3	**Working with Clients and Consultants Using Revit Architecture** • Overview. • Linking Revit Architecture Projects • RVT Link Display Settings Dialog Box • Guidelines for Linking Revit Models • Overview. • Copy and Monitor Tools • Coordinating and Monitoring Changes in a Current Project. • Guidelines for Coordinating and Monitoring Changes • Overview About Interference Checking. • Guidelines for Checking and Fixing Interference Conditions.	**1-Hour**	**4.00 PM – 5.00 PM**

Training Programme Day 2

Chapter	Topic	Duration	Time
Chapter 4	**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	**1-Hour**	**9.00 AM - 10.00 AM**

Chapter 5	**Working with Rebar** • Overview • About 3D Rebars • Process of Adding 3D Rebar to Beams and Columns • Guidelines for Adding 3D Rebar to Beams and Columns • Overview • About Area and Path Reinforcements • Process of Adding Reinforcements • Guidelines for Working with Reinforcements	**3-Hour**	**10.00 AM-1.00 PM**
Chapter 6	**Working with Steel** • Overview. • About 3D Steel Gusset Plates • Process of Creating a 3D Steel Gusset Plate • Guidelines for Creating 3D Steel Gusset Plates • Overview. • About Steel Stiffeners • Process of Adding Steel Stiffeners • Guidelines for Adding Steel Stiffeners	**1-Hour**	**2.00 PM - 3.00 PM**
Chapter 7	**Multi-User Worksharing** • Overview • About Worksets . • Process of Creating and Using Worksets • About Central Files • Moving Central Files • Guidelines for Using Worksets and Central Files • Overview. • Methods of Opening Worksets. • Methods of Setting Workset Visibility. • Process of Managing Worksets • Guidelines for Managing Worksets Remotely	**2-Hour**	**3.00 PM – 5.00 PM**