

# **Building Information Modeling (BIM) using Autodesk**

# **Revit Structure**

# (Duration: 80 Hrs) Course Curriculum

# Chapter 1: Introduction to BIM and Autodesk Revit

- BIM and Autodesk Revit
- Workflow and BIM
- Revit Terms
- Revit and Construction Documents
- Overview of the Interface
- Starting Projects
- Viewing Commands

# Chapter 2: Basic Sketching and Modify Tools

- Using General Sketching Tools
- Editing Elements
- Working with Basic Modify Tools: Moving, Copying, Rotating & Mirroring Elements. Creating Linear & Radial Arrays
- Workshops

## **Chapter 3: Starting Structural Projects**

- Linking and Importing CAD Files
- Linking in Revit Models
- Setting Up Levels
- Copying & Monitoring Elements.
- Coordinating Linked Models

## Chapter 4: Working with Views

- Setting the View Display
- Duplicating Views
- Adding Callout Views
- Creating Elevations and Sections
- Workshops

## **Chapter 5: Structural Grids and Columns**

- Adding Structural Grids
- Placing Structural Columns
- Workshops

## Chapter 6: Foundations

- Modeling Walls
- Adding Wall Footings
- Creating Piers and Pilasters
- Adding Isolated Footings

Workshops



#### Chapter 7: Structural Framing

- Modeling Structural Framing
- Modifying Structural Framing
- Adding Trusses
- Workshops

#### Chapter 8: Adding Structural Slabs

- Modeling Structural Slabs: Modifying Slabs, Slab Edges, Joining Geometry
- Creating Shaft Openings
- Workshops

## **Chapter 9: Structural Reinforcement**

- Structural Reinforcement
- Adding Rebar
- Modifying Rebar
- Reinforcing Walls, Floors, and Slabs
- Workshops

#### **Chapter 10: Structural Analysis**

- Preparing Projects for Structural Analysis
- Viewing Analytical Models
- Adjusting Analytical Models
- Placing Loads
- Workshops

## Chapter 11: Project – Concrete Structure

#### **Chapter 12: Construction Documents**

- Setting Up Sheets
- Placing and Modifying Views on Sheets
- Printing Sheets
- Annotating Construction Documents
- Creating Details
- Workshops