Revit Structure Essentials

Civil Engineering

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Course Description

Autodesk Revit is building information modeling software for architects, structural engineers, MEP engineers, designers and contractors. It allows users to design a building and structure and its components in 3D, annotate the model with 2D drafting elements, and access building information from the building models database. Revit is 4D BIM capable with tools to plan and track various stages in the buildings lifecycle, from concept to construction and later demolition.

Course Target

In this course, participants will be introduced to the concept of Building Information Modelling (BIM) itself, as well as the basics of Autodesk Revit. Upon the completion of your Revit training course at Excellent-Way you will be geared with the knowledge to create both residential and commercial multifaceted Revit models.
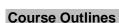
Course Duration

10 Sessions x 3 Hours per Session = 30 Total Hour

Attending the Course

The course includes workshops and in-session applications for every set of points covered.
Each trainee will have a chance to apply his new skills on actual project supervised by the instructor. The location is fully equipped with high end computers so you won't have to bring your laptop

Course Outlines

Introduction

Building Information Modeling
Overview of the Interface
Standard Terminology
Starting Projects
Viewing Commands

Basic Drawing and Editing Tools

General Drawing Tools
Editing Elements Basic
Modifying Tools

Setting up Levels and Grids

Creating Structural Grids
Adding Foundations and Structural Slabs
Creating Wall Footings
Isolated Footings
Combined Footings
Raft Foundation
Piers and Pilasters
Creating Structural Slabs

Beams and Framing Systems

Adding Beams and Beam Systems
Modifying Beams
Framing Annotation
Adding Bracing

Annotating Construction Documents

Working with Dimensions
Working with Text
Adding Detail Lines and Symbols
Creating Legends

Detailing

Setting up Detail Views
Creating, Annotating and Patterning Details

Scheduling

Structural Schedules
Graphical Column Schedules
Working with Schedules
Creating Schedules

Creating Revit Families

Family Concepts and Techniques
Creating Custom Families

Structural Analysis

Creating and Placing Loads
Exporting for Structural Analysis

Working with Views

Duplicating Views
Adding Callout Views
Setting the View Display
Elevations and Sections

Starting Structural Projects

Importing and Linking CAD Drawings
Linking Architectural Projects
Copying and Monitoring Elements

Structural Reinforcement

Adding Structural Reinforcement
Adding Rebar
Modifying Rebar Placement
Reinforcing Walls, Floors, and Slabs

Construction Documents

Setting up Sheets
Placing and Modifying Views on Sheets
Revision Tracking
Printing Sheets

Course outline is subjected to minor changes as per class and trainees requirements.