



Theory	Practical	Total Course Length
25 Hours	25 Hours	50 Hours

### Synopsis

In this course you will learn how to create a complete 3D Structural Model.

Using hands-on exercises in both Imperial and Metric to represent Real-World situations and be able to deal with various Structural Design Projects.

### Prerequisites

Trainee should have knowledge of Structural Plans, Elevations & Section.  
A basic understanding of computer's operating system, launching an application, creating and saving files is a must.

### What will you Learn ?

Introduction to Autodesk Revit Structure  
Starting New Project  
Drawing and Modifying Structural Elements  
Foundations  
Framing  
Slabs  
Vertical Circulation  
Views Setup  
Structural Reinforcement  
Preparing Project for Structural Analysis  
Annotating Construction Documents  
Tags & Schedules  
Sheet Composition  
Managing the project  
Project Team Collaboration  
Phasing and Groups  
Exporting Views and Sheets

### Outline

#### Introduction to Autodesk Revit Structure

Building Information Modeling and Overview of the Interface

#### Starting New Project

Project Template, Setup New Project, Levels, Linking, Importing CAD Files and Inserting Image

#### Drawing and Modifying Structural Elements

Structural Grids & Structural Columns

#### Foundations

Structural Walls & Wall Footings

Piers & Pilasters

Isolated Footings

#### Framing

Drawing & Modifying Structural Framing

Adding Trusses

#### Slabs

Structural Slabs & Shaft Openings

#### Vertical Circulation

Floors, Creating Shaft Openings and Creating Sloped Floors

#### Views Setup

Sections, Elevations, Detail Views, Filters and Duplicating View

#### Reinforcement

Adding and Modifying Rebar

Reinforcing Walls, Floors & Slabs

#### Analysis

Viewing & Adjusting Analytical Models

Placing Loads

#### Annotation Construction Documents

Dimensions, Text, Detail Lines and Symbols

#### Tags and Schedules

Tags, Rooms and Room Tags, Schedules and Legends

#### Managing the project

Additional Settings, Transfer Project Standards, Object Styles & Purged Unused

#### Project Team Collaboration

Worksets, Design Options and Groups

#### Family Creation

Foundation, Columns etc

#### Exporting Views and Sheets

Export Settings & Exporting to CAD Format

