Autodesk Revit

COURSE DESCRIPTION

Autodesk Revit is building information modeling software for architects, structural engineers, MEP engineers, designers and contractors developed by Autodesk. 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 model's database. Revit is 4D BIM capable with tools to plan and track various stages in the building's lifecycle, from concept to construction and later maintenance and/or demolition.

COURSE OBJECTIVES

After completing this course, you will be able to:

- Understanding the purpose of Building Information Management (BIM) and how it is applied in the Autodesk Revit software.
- Navigating the Autodesk Revit workspace and interface.
- Working with the basic drawing and editing tools.
- Creating Levels and Grids as datum elements for the model.
- Creating a 3D building model with walls, curtain walls, windows, and doors.
- Adding floors, ceilings, and roofs to the building model.
- Creating component-based and custom stairs.
- Adding component features, such as furniture and equipment.
- Setting up sheets for plotting with text, dimensions, details, tags, and schedules.
- Creating details.
- Starting a structural project based on a linked architectural model
- Adding structural columns and walls
- Adding foundations and structural slabs
- Structural reinforcement
- Beams, trusses, and framing systems
- Analytical models and placing loads
- Project practices to reinforce learning Construction documents

- Scheduling
- Inserting and connecting MEP components and using the System Browser.
- Working with linked architectural files.
- Creating spaces and zones so that you can analyze heating and cooling loads.
- Calculating heating and cooling loads
- Creating HVAC networks with air terminals, mechanical equipment, ducts, and pipes.
- Creating plumbing networks with plumbing fixtures and pipes.
- Creating electrical circuits with electrical equipment, devices, and lighting fixtures and adding cable trays and conduits.
- Creating HVAC and plumbing systems with automatic duct and piping layouts.
- Testing duct, piping and electrical systems.
- Creating and annotating construction documents.
- Detailing in the Autodesk Revit software

PREREQUISITES

This course is designed for new users of Revit. No previous CAD experience is necessary. It is recommended that you have architectural design, drafting, or engineering experience.