



BIM Kida Institute of Engineering Software

Revit Course Syllabus

Revit RCC

Revit Architecture

Revit MEP

Revit MEP Syllabus

Week 1: Introduction to Revit MEP & Project Setup

Understanding Revit MEP Interface & Workflows

Setting up a new MEP project (Templates, Units, Levels)

Linking Architectural & Structural models

Understanding MEP families and categories

Project Browser and View Templates

Week 2: HVAC (Mechanical Systems) Modeling

Creating and placing Air Terminals, Ducts, and HVAC Equipment

Defining ductwork types and duct routing principles

Adding mechanical systems (Supply, Return, Exhaust)

Sizing ducts and airflow calculations

Working with mechanical spaces and zones

Week 3: Plumbing Systems Modeling

Placing plumbing fixtures and equipment

Pipe routing techniques and slope settings

Cold water, Hot water, and Drainage systems

Creating and modifying pipe fittings and accessories

Pipe sizing and flow calculations

Week 4: Fire Protection & Hydronic Systems

Designing Fire Protection systems (Sprinklers, Pumps)

Pipe layout and sprinkler placement

Hydronic piping systems (Chilled Water, Heating)

Equipment connections and system validation

Pressure loss calculations

Week 5: Electrical Systems Modeling

Placing Electrical Fixtures (Lights, Switches, Receptacles)

Power distribution systems (Panels, Transformers, Circuits)

Cable tray and conduit routing

Load calculations and Panel schedules

Circuiting and Voltage drop analysis

Week 6: MEP Coordination & Clash Detection

Understanding BIM Coordination for MEP

Performing Clash Detection using Navisworks

Adjusting MEP layouts to avoid conflicts

Using Worksets for multi-user collaboration

Linking Revit models with external consultant files

Week 7: Documentation & Scheduling

Creating MEP Sheets, Sections, and Callouts

Generating schedules (Duct, Pipe, Lighting, Panel)

Annotations, Dimensions, and Tagging

Printing and exporting MEP documentation

Exporting models to DWG, IFC, and Navisworks

Week 8: Project Work & Final Review

Working on a real-world MEP project

Applying best practices for modeling and coordination

Reviewing MEP system efficiency and compliance

Final project submission & feedback

Industry standards and career guidance

Week 9: Introduction to Navisworks

Overview of Navisworks and its applications

Understanding the Navisworks interface

Navigating 3D models (Orbit, Walk, Fly modes)

Creating viewpoints and saving camera angles

Using sectioning tools

File formats and importing models (NWC, NWD, and NWF)

Week 10: Clash Detection

Introduction to clash detection

Setting up clash tests

Reviewing and managing clash results

Exporting and reporting clashes

Using sectioning tools

File formats and importing models (NWC, NWD, and NWF)

Week 11: Revit Add-ins & Tools

DiRoots (Automation & Productivity Tools)

PyRevit

Dynamo for Revit