

AUTODESK REVIT MEP - BASIC



Autodesk Revit MEP Essentials Course

Revit MEP The Complete Guide is designed to give you a solid understanding of Revit MEP features and capabilities, from navigating the interface to the more advanced subjects. This course covers the Getting Started with an MEP Project; Spacing, Zones, and Cooling and Heating Load; Creating Construction Documents, and Creating Families and Work-sharing.

Autodesk Revit MEP has been created for engineers, designers, architects and CADD technicians; allowing them to design, document, and analyze building information for mechanical, electrical, and plumbing disciplines. This version brings new and exciting features, like Fabrication Modeling.

Course Objective

Autodesk Revit MEP course is a summation of three individual parts where “M” stands for mechanical, “E” stands of electrical and “P” stands for plumbing. This course deals with the basic knowledge to the family creation and creating personal library of components. Here you will be dealing with the introduction, the drawing of plans on pre Drafted architectural plans along with materials take off and scheduling .Revit is mainly for BIM where you will be learning the Calculation ad cost estimation of designs individually.

Course Outline

1. Introduction to Autodesk Revit MEP
 - a. Building Information Modelling with Revit MEP
 - b. Overview of the Revit MEP
 - c. Interface
 - d. Application Menu
 - e. Quick Access Toolbar
 - f. Ribbon
 - g. Tooltips
 - h. Options Bar
 - i. Properties Palette
 - j. Status Bar
 - k. Drawing Windows

2. Basic Drawing and Editing Tools
 - a. General Drawing Tools
 - b. User Interface Tools
 - c. Drawings Aids

- d. Reference Planes
- e. Editing Revit MEP Elements
- f. Selection Elements
- g. Standard Editing Tools
- h. Modifying Multiple Elements
- i. Basic Modifying Tools
- j. Moving and Copying Elements
- k. Rotating Elements
- l. Mirroring Elements
- m. Creating Linear and Radial Arrays
- n. Additional Editing Tools
- o. Aligning Elements
- p. Splitting Linear Elements
- q. Trim and Extend
- r. Offsetting Elements

3. Views

- a. Duplicating Views
- b. Duplicating Types
- c. Adding Callout Views
- d. Modifying Callout
- e. Setting the View Display
- f. Underlays
- g. View Range
- h. Hiding Graphics in a view
- i. Overriding Graphics in a view
- j. Creating Elevations
- k. Modifying the Elevation
- l. Creating Sections
- m. Modifying Sections
- n. Working with Ceilings
- o. Sketching Ceilings
- p. Modifying Ceilings

4. Construction Documents

- a. Setting up Sheets
- b. Placing and Modifying Views on Sheets
- c. Modifying Views on Sheets
- d. Working Inside Views
- e. Printing Sheets Topic

5. Annotating Construction Documents

- a. Working with Dimensions
- b. Modifying Dimensions
- c. Working with Text
- d. Spell Checking
- e. Creating Text Types
- f. Adding Detail Lines and Symbols
- g. Using Symbols

- h. Creating Legends

6. Tags and Schedules

- a. Adding Tags
- b. Tagging in 3D Views
- c. Tagging Multiple Elements
- d. Working with Schedules
- e. Modifying Schedule
- f. Modifying a Schedule on a sheet
- g. Importing and Exporting Schedules

7. HVAC System

- a. About HVAC System
- b. Adding Air Terminals and Mechanical Equipment
- c. Air Terminal
- d. Mechanical Equipment
- e. Adding Ductwork
- f. Modifying Ducts
- g. Working with Fittings
- h. Creating Duct System
- i. Automatic Ductwork Layouts
- j. Mechanical Settings
- k. Automatic Ductwork

8. Hydronic Piping System

- a. About Hydronic Piping System
- b. Adding Mechanical Equipment
- c. Mechanical Settings Piping
- d. Drawing Piping
- e. Creating Parallel Pipes
- f. Modifying Pipes
- g. Working with fittings and Accessories
- h. Automatic Piping Layout
- i. Automatic Piping Layouts
- j. Fire Protection Systems

9. Plumbing Systems

- a. About Plumbing Systems
- b. Modifying Views for plumbing
- c. Adding Plumbing Fixtures
- d. Reference Planes
- e. Drawing Piping for Plumbing System
- f. Modifying Plumbing Pipes
- g. Plumbing Pipe Fittings and Accessories
- h. Working with Plumbing Systems
- i. Automatic Layouts
- j. Plumbing Schedules

10. Electrical Systems

- a. About Electrical Systems
- b. Electrical Settings
- c. Placing Electrical Components
- d. Electrical Equipment
- e. Electrical Devices
- f. Lighting Fixtures
- g. Creating Electrical Circuits
- h. Creating Power Circuits
- i. Creating a Switch System
- j. Create Other Circuits
- k. Cable Trays and Conduit
- l. Creating Parallel Conduit Runs
- m. Modifying Cable Tray and Conduit
- n. Adding Fittings
- o. Electrical Panel Schedules
- p. Create Panel Schedules
- q. Modifying Panel Schedules

11. Rendering

- a. Render setup
- b. Lighting for render
- c. Sun setting
- d. Walkthrough
- e. Setting up document

12. Documentation

- a. Setting up title block
- b. Creating schedule
- c. Cost estimation
- d. Setting up sectional view
- e. Converting the BIM into excel format
- f. Saving into pdf
- g. Setting up annotation
- h. Adding color schemes
- i. Adding 3d view to final block