





AUTODESK REVIT MEP FUNDAMENTALS



FOR WHOM

MEP Designers, MEP Drafters, MEP Professionals

PRE-REQUISITION

Working knowledge of Windows Operating Systems. Working knowledge of MEP design and terminology (recommended).

Revit Architecture Fundamentals (highly recommended).

DURATION | VERSION

3 DAY(S), Version 2022

COURSE OBJECTIVES

To take full advantage of Building Information Modeling, the Autodesk® Revit®: Fundamentals for MEP Training has been designed to teach the concepts and principles of creating 3D parametric models of MEP system from engineering design through construction documentation.

The Training is intended to introduce learners to the software's user interface and the basic HVAC, electrical, and piping/plumbing components that make the Autodesk Revit software a powerful and flexible engineering modeling tool. The Training will also familiarize learners with the tools required to create, document, and print the parametric model. The examples and practices are designed to take the learners through the basics of a full MEP project from linking in an architectural model to construction documents.

We also provide real live project situations solving tips by Trainers who possesses actual site experiences and live project datasets for you to work-on.

COURSE TOPICS

Introduction to BIM and Autodesk Revit

- BIM and Autodesk Revit
- Overview of the Interface
- 3. Starting Projects
- 4. Viewing Commands

Basic Sketching and Modify Tools

- 1. Using General Sketching Tools
- Inserting Components
- Selecting and Editing Elements
- Working with Basic Modify Tools
- 5. Working with Additional Modify Tools

COURSE TOPICS

Starting Systems Projects

- 1. Linking and Importing CAD Files
- 2. Linking in Revit Models
- 3. Setting Up Levels
- 4. Copy and Monitoring Elements
- 5. Coordinating Linked Models
- 6. Batch Copy Fixtures

Design Development Phase:

Working with Views

- 1. Modifying the View Display
- 2. Duplicating Views
- 3. Adding Callout Views
- 4. Creating Elevations and Sections

Spaces

- 1. Preparing a Model for Spaces
- Adding Spaces
- 3. Working with Spaces
- Exporting for Energy Analysis

Basic Systems Tools

- 1. Connecting Components
- 2. Creating Systems Overview

HVAC Systems

- 1. Adding Mechanical Equipment and Air Terminals
- Adding Ducts and Pipes
- 3. Modifying Ducts and Pipes

Plumbing Systems

- Adding Plumbing Fixtures and Equipment
- 2. Adding Plumbing Pipes
- 3. Modifying Plumbing Pipes
- 4. Adding Fire Protection Systems

Advanced Systems for HVAC and Plumbing

- 1. Creating and Modifying Systems
- Creating Automatic Layouts
- 3. Testing Systems

Electrical Systems

- 1. About Electrical Systems
- 2. Placing Electrical Components
- 3. Creating Electrical Circuits
- 4. Setting up Panel Schedules







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COURSE TOPICS

Electrical Systems (cont.)

- 5. Adding Cable Trays and Conduit
- 5. Testing Electrical Layouts

Construction Documents Phase:

Creating Construction Documents

- . Setting Up Sheets
- 2. Placing and Modifying Views on Sheets
- 3. Printing Sheets

Annotating Construction Documents

- 1. Working with Dimensions
- 2. Working with Text
- 3. Adding Details Lines and Symbols
- 4. Creating Legends

Adding Tags and Schedules

- Adding Tags
- Working with Schedules

Creating Details

- 1. Setting Up Details Views
- 2. Adding Detail Components
- 3. Annotating Details

COURSE TOPICS

Additional Tools

- 1. Building Type Settings
- 2. Defining Color Schemes
- 3. Custom Duct and Piping Types
- 4. Work with System Graphics
- 5. Pressure Loss Reports
- 6. Guide Grids and Sheets
- 7. Revision Tracking
- 8. Annotating Dependent Views
- 9. Importing and Exporting Schedules
- 10. Creating Building Component Schedules
- 11. Keynoting and Keynote Legends

Introduction to Worksharing

1. Introduction to Worksharing

Zones

- 1. Creating Zones
- 2. Applying Color Schemes