

ENGINEERING EDUCATION SERVICES

Revit MEP Professional

Course Length: 3 Weeks

Revit MEP is a single software application that aids a BIM (Building Information Modeling) workflow from theory to construction.

MEP software helps in drafting, designing, calculating engineering data and documentation of building systems. It was created by Autodesk for professionals who engage in MEP (mechanical, electrical, and plumbing) engineering.

Topics Covered

- Introduction to MEP workspace interface and Usage
- 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.
- 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.
- Adding tags and creating schedules
- Detailing your design for documentation.

Prerequisites

- Experience with AutoCAD and a sound understanding and knowledge of engineering terminology.

Course description shown for Autodesk Revit 2018. Topics, curriculum, and/or prerequisites may change depending on software version.



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Training Course Contents

Chapter 1:

- 1.1 BIM and Autodesk Revit
- 1.2 Overview of the Interface
- 1.3 Starting Projects
- 1.4 Viewing Commands

Chapter 2:

- 2.1 Using General Sketching Tools
- 2.2 Inserting Components
- 2.3 Selecting and Editing Elements
- 2.4 Working with Basic Modify Tools

Chapter 3:

- 3.1 Connecting Components
- 3.2 Working with Additional Modify Tools
- 3.3 Creating Systems - Overview

Chapter 4:

- 4.1 Linking in Revit Models
- 4.2 Setting Up Levels
- 4.3 Copying and Monitoring Elements
- 4.4 Batch Copying Fixtures
- 4.5 Coordinating Linked Models

Chapter 5:

- 5.1 Setting the View Display
- 5.2 Duplicating Views
- 5.3 Adding Callout Views
- 5.4 Creating Elevations and Sections

Chapter 6:

- 6.1 Preparing a Model for Spaces
- 6.2 Adding Spaces
- 6.3 Working with Spaces

Chapter 7:

- 7.1 Heating and Cooling Loads Analysis & Creating Zones
- 7.2 Applying Color Schemes
- 7.3 Analyzing the Heating and Cooling Loads

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Chapter 8: HVAC Networks

- 8.1 Adding Mechanical Equipment and Air Terminals
- 8.2 Adding Ducts and Pipes
- 8.3 Modifying Ducts and Pipes

Chapter 9: Plumbing Networks

- 9.1 Adding Plumbing Fixtures and Equipment
- 9.2 Adding Plumbing Pipes
- 9.3 Modifying Plumbing Pipes
- 9.4 Adding Fire Protection Networks

Chapter 10: Advanced Systems for HVAC and Plumbing

- 10.1 Creating and Modifying Systems
- 10.2 Creating Automatic Layouts
- 10.3 Testing Systems

Chapter 11: Electrical Systems

- 11.1 About Electrical Systems
- 11.2 Placing Electrical Components
- 11.3 Creating Electrical Circuits
- 11.4 Setting up Panel Schedules
- 11.5 Adding Cable Trays and Conduit
- 11.6 Testing Electrical Layouts

Chapter 12: Creating Construction Documents

- 12.1 Setting Up Sheets
- 12.2 Placing and Modifying Views on Sheets
- 12.3 Printing Sheets

Chapter 13:

- 13.1 Working with Dimensions
- 13.2 Working With Text
- 13.3 Adding Detail Lines and Symbols
- 13.4 Creating Legends

Chapter 14:

- 14.1 Adding Tags
- 14.2 Working with Schedules

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