AutoDesk Revit MEP Essentials

Duration : 3 days

Overview

During this course delegates will learn about building information modelling and the tools for parametric MEP systems design and documentation using Autodesk Revit® MEP. Begin the three-day guide by learning the fundamental features of Autodesk Revit MEP, then progressing through schematic design, system analysis and construction documentation, and finishing with design visualisation.

Target Audience

New Autodesk Revit MEP users, users of AutoCAD MEP, or other Autodesk software users who want to learn essential elements of Autodesk Revit MEP

Prerequisites

MEP engineering design, drafting, or engineering experience is highly recommended. No previous CAD experience is necessary. A working knowledge of Microsoft supporting systems.

Objectives

- Understand the concepts of building information modelling.
- Use the tools for parametric engineering design and documentation using Autodesk Revit MEP.
- Complete their first Autodesk Revit MEP project after completing this course.

Course Content

DAY 1

INTRODUCTION TO BIM AND AUTODESK REVIT
Building Information Modelling
Exploring the User Interface
Starting a New Project
Working with Revit Elements and Families
Viewing the Model
Exploring Views – Sections, Elevations & 3D
Controlling Object Visibility

BASIC DRAWING AND MODIFY TOOLS
Using General Drawing Tools
Editing Elements
Working with Basic Modify Tools
Working with Additional Modify tools

STARTING AUTODESK REVIT MEP PROJECTS
Defining Discipline Settings
Linking AutoCAD Drawings
Linking in Autodesk Revit Models
Copying and Monitoring Elements
Batch Copy and Monitor
Coordination Review
Setting Up Levels

WORKING WITH VIEWS
Duplicating Views
Adding Callout Views
Setting the View Display
Elevations and Sections

UNDERSTANDING MEP SYSTEMS
About MEP Systems
Working with Components
Connecting Components
Creating Systems – Overview
Analysing Systems

DAY 2

SPACES AND ZONES
Creating Spaces
Working with Spaces
Creating Zones

ENERGY ANALYSIS
Preparing a Project for Energy Analysis
Analyzing the Heating and Cooling Loads
Exporting for Secondary Analysis

HVAC SYSTEMS
Creating HVAC Systems
Adding Air Terminals
Adding Mechanical Equipment
Adding Ductwork
Modifying Ducts
Creating Duct Systems
Automatic Ductwork Layouts

HYDRONIC PIPING SYSTEMS
Creating Hydronic Piping Systems
Adding Mechanical Equipment
Drawing Piping
Creating Hydronic Systems
Automatic Piping Layouts

PLUMBING SYSTEMS
Creating Plumbing Systems
Adding Plumbing Fixtures
Drawing Piping for Plumbing Systems
Working with Plumbing Systems
Fire protection Systems

DAY 3

ELECTRICAL SYSTEMS
Creating Electrical Systems
Placing Electrical Components
Creating Electrical Circuits
Cable Trays and Conduit
Electrical Panel Schedules

ANNOTATING CONSTRUCTION DOCUMENTS
Working with Dimensions
Working with Text
Adding Details Lines and Symbols
Creating Legends

ADDING TAGS AND SCHEDULES
Adding Tags
Working with Schedules

CREATING DETAILS
Setting Up Detail Views
Adding Details Components
Annotating Details
Importing Typical DWG Details.

CREATING CONSTRUCTION DOCUMENTS
Setting Up Sheets
Placing and Modifying View on Sheets
Printing Sheets
Exporting sheets to DWG format.