# it training solutions Itd

## **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<sub>3</sub>

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.

## **Training Options**

- Public scheduled courses at one of our training venues
- Private courses delivered at client's premises throughout the UK, at our training venues or a convenient third-party location
- Bespoke customised courses written to your specific needs, delivered at client's premises throughout the UK, at our training venues or a convenient third-party location
- For further information please contact us on 0191 377 8377

#### What's Included

- 1 delegate per computer
- Relaxed refreshment area at our training venues
- Lunch and refreshments when training is delivered at our training venue
- Comprehensive course manual and exercises