

Revit MEP 2009 Essentials

Courseware Description

Students use Revit® MEP 2009 to learn about building information modeling and the tools for parametric MEP systems design and documentation. Students begin the three-day course by learning the fundamental features of Revit MEP 2009, and then progress through schematic design, system analysis, and construction documentation before finishing with design visualization.

Objectives

The primary objective of this courseware is to teach students the concept of building information modeling and introduce the tools for parametric engineering design and documentation using Revit MEP 2009.

After completing this course, students will be able to:

- Describe the benefits of building information modeling.
- Use the fundamental features of Revit MEP 2009.
- Set up, import, and link projects with Revit MEP 2009.
- Use the parametric 3D design tools to design and analyze MEP systems.
- Create detailing and drafting views.
- Collaborate with architects and engineers on projects.
- Annotate and create project schedules.
- Create construction documentation.

Who Should Attend

This courseware is designed for new users of Revit MEP 2009.

Prerequisites

No previous CAD experience is necessary. However, before using this courseware, students should have a working knowledge of the following:

- MEP engineering principles.
- Microsoft® Windows® XP or Microsoft® Windows® 2000.

Course Outline

Day 1

Building Information Modeling

- Building Information Modeling

Revit MEP Basics

- Exploring the User Interface
- Working with Revit Elements and Families

Viewing the Model

- Exploring Views
- Controlling Object Visibility
- Working with Section and Elevation Views
- Working with 3D Views

Starting a New Project

- Setting Up a Project
- Setting Up View Templates
- Defining Discipline Settings
- Importing Typical DWG™ Details
- Linking a Revit Model
- Coordinating Linked Projects

Day 2

Defining Volumes

- Representing Volumes
- Creating Zones
- Building Performance Analysis

Heating and Cooling Load Calculations

- Defining Heat and Cooling Information
- Calculating Heating and Cooling Loads

HVAC Systems

- Creating an HVAC System
- Generating Layouts

Piping Systems

- Creating System Piping

Plumbing Systems

- Creating Plumbing Systems

Fire Protection Systems

- Creating Fire Protection Systems

Electrical Systems

- Creating Electrical Circuits
- Generating Wires

Day 3

Working with Architects and Engineers

- Running an Interference Check
- Multiple Disciplines and Linked Files

Detailing and Drafting

- Creating Callout Views
- Working with Detail Views
- Working with Drafting Views

Annotations and Schedules

- Adding Tabs
- Adding Dimensions, Symbols, and Text
- Creating Legends
- Working with Schedules

Construction Documentation

- Creating Sheets and Title Blocks
- Printing Sheets

Note: The suggested course duration is a guideline. Course topics and duration may be modified by the instructor based upon the knowledge and skill level of the course participants.