

# REVIT MEP

### **ADVANCED**



#### **COURSE DESCRIPTION**

This course covers advanced tools of Revit MEP, including services co-ordination, working within a team, phasing, design options and advanced content creation. Delegates are taught the advanced concepts of Building Information Modelling and the advanced tools for parametric MEP design and documentation.



# TARGET GROUP

Intermediate users of Revit MEP.



# COURSE DURATION

Full Time: 3 Days (10.30am-5.30pm)



# **LEARNING OUTCOME**

By the end of the course, participants should be able to:

- Create a Template and Title blocks
- Creating views
- Use Group functions
- Setup and create Solar Study
- · Using Walkthrough
- Create Scheduling
- Detailing Works
- · Ductwork using Revittools
- Using Keynotes
- Working with Work sharing
- Using and create Project Phasing
- Using Design Options
- Project Linking
- Working with Architects and Engineers
- Import and Exports Settings
- Conceptual Massing
- In-Place Family
- Family Creation

#### **CAREER PATH**

3D Modeller, BIM Technician, 3D Visualizer, Project Technical Draughtperson, 3D CAD Draughtperson, 3D CAD Designer

#### **COURSE PRE-REQUISITES**

An intermediate knowledge of Revit MEP is required, preferably the Revit MEP Essentials Training Course. An architectural design, drafting or engineering experience is highly recommended. It is recommended that delegates have knowledge of Microsoft Windows 7/Vista or Microsoft Windows XP

#### **CERTIFICATE**

MTTC Certificate of Completion will be issued to participants with full attendance record upon completion of training.



#### TRAINING COURSE OUTLINE

### REVIT MEP

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COURSE CONTENT



#### **Building Information Modelling**

- Workflow and BIM
- Views and sheets

#### **Starting Revit MEP Projects**

- · Linking in Architectural Projects
- · Managing Links
- Copying and Monitoring Elements
- Coordination Setting Batch
- Copying Fixtures
- · Monitoring Elements
- Working with monitored elements
- Coordination review
- Setting up levels
- Modifying levels

#### **Creating Views**

- · Duplicating Views
- Duplication Types
- Adding callout views
- Modifying callouts
- Setting the view display
- Underlays
- View range
- · Overriding Graphics in a view
- Elevations and Sections
- Elevations
- Sections
- · Modifying Elevations and sections

#### **Understanding Revit MEP Systems**

- About MEP System
- Working with components
- Loading family types
- Creating system-overview
- Using the system browser
- System graphics
- Duct and piping system graphic overrides
- Using graphic overridesfilters
- · Connecting components
- Creating automatic layouts
- Analyzing system
- · Checking system
- Typical schedules

#### DAY 2

#### **Spaces and Zones**

- Creating spaces
- Preparing a model for spaces
- Working with spaces
- · Special space situations
- Creating zones
- Using the system browser with zones
- Creating color schemes

#### **Energy Analysis**

- Preparing a project for energy analysis
- Preparing energy analysis
- Analysing the heating and cooling loads
- · Exporting for secondary analysis

#### **HVAC Systems**

- About HVAC Systems
- Mechanical Settings
- Adding air terminals and mechanical equipment
- Air terminals
- Mechanical Equipment
- Adding Ductwork
- Adding Ducts
- Modifying Ducts
- Changing Ducts using standard tools
- Converting ducts and duct types
- · Adding isulation and lining
- Modifying the justification
- Working with fittings
- · Creating the systems
- Automatic ductwork layouts
- Automatic ductwork

#### **Hydronic Piping System**

- About Plumbing
- Mechanical Settings
- · Adding Mechanical Equipment
- Drawing piping
- Creating Parallel Pipes
- Modifying Pipes
- Working with fittings and accessories
- Creating hydronic systems
- · Automatic piping layouts



#### TRAINING COURSE OUTLINE

### REVIT MEP

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COURSE CONTENT



#### **Plumbing Systems**

- About Plumbing
- Modifying views for plumbing
- Adding plumbing fixtures
- · Reference planes
- · Drawing piping for plumbing systems
- Modifying plumbing pipes
- Plumbing pipe fittings and accessories
- · Working with plumbing system
- Automatic layouts
- Plumbing schedules

#### DAY 3

#### **Fire Protection Systems**

Working with fire protection systems

#### **Electrical Systems**

- · About electrical systems
- Electrical settings
- Placing electrical components
- Electrical equipment
- · Electrical devices
- Lighting fixtures
- Creating electrical circuits
- Creating power circuits
- Create a switch system
- · Create other circuits
- Cable trays and conduit
- Creating parallel conduit runs
- Modifying cable tray and conduit
- Adding fittings
- Electrical panel schedules
- Create panel schedules
- Modifying panel schedules

#### **Construction Documents**

- Setting Up Sheets
- Sheet (Title Block) Properties
- Placing and modifying views on sheets
- · Modifying views on sheets
- Working inside views
- Adding Revisions
- Printing Sheets
- Printing options

#### **Tags and Schedules**

- Adding tags
- Tagging in 3D views
- Tagging multiple elements
- Working with schedules
- Modifying schedules
- · Modifying a schedules on a sheet
- Importing and exporting schedules
- Creating schedules
- Building components schedules
- Modifying schedules
- Modifying schedules properties
- · Setting up cell appearance

#### **Detailing**

- Setting up detail views
- · Connecting a callout to a drafting view
- Saving a drafting view
- · Creating details
- · Details lines
- · Details components
- Annotating details
- Using symbols
- Patterning

#### **Create MEP Families**

- · Introduction to families
- Making Air Terminal Families