



AUTODESK REVIT MEP ADVANCED TRAINING

Objectives

This 2-day course covers the advance of Autodesk Revit MEP application. It is to teach trainee the commands and tools necessary for design on mechanical, electrical, and plumbing (MEP) systems. After completing this guide, trainee will be able to:

- ✓ Import and export data between AutoCAD
- ✓ Link Revit models, coordinate and monitor changes in a current project and a linked project, and check and fix interference conditions
- ✓ Create, use, and manage work sets
- ✓ Publish Revit MEP files to DWF files
- ✓ Create working and correct Revit Families for inclusion in Revit Projects, inclusive but not limited to:
 - Mechanical Equipment
 - Lighting Fixtures
 - Air Diffusers

Training Programme Day 1

| Chapter | Topic | Duration | Time |
|-----------|---|----------|---------------------|
| Chapter 1 | Introduction to Revit Families <ul style="list-style-type: none"> • Concepts on System, loadable & in place family • Concepts on family category, type & instance • Concepts on the family connector • The usage of the family templates | 1 -Hour | 09.00 AM – 10.00 AM |
| Chapter 2 | Get started with family creation <ul style="list-style-type: none"> • The usage of extrusion, blend, revolve, swept, swept blend & void forms • Concepts on the X, Y, Z planes and adding planes | 1-Hour | 10.00 AM – 11.00 AM |
| Chapter 3 | Family Parametric Box <ul style="list-style-type: none"> • Parameters on Width, Length & Height • Family type | 1-Hour | 11.00 AM – 12.00 PM |

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| Chapter 4 | Family Parametric Electrical DB Board <ul style="list-style-type: none"> • Adding electrical connector • Adding Cable tray connector • Adding conduit connector • Adding and modifying family parameters (Detailing) | 1-Hour | 12.00 PM – 01.00 PM |
| Chapter 5 | Family Parametric Valve and symbols <ul style="list-style-type: none"> • Adding pipe connector • Adding details • Adding symbols • Visibility Configuration | 2-Hour | 02.00 PM – 04.00 PM |
| Chapter 6 | Family Parametric Air Terminals and symbols <ul style="list-style-type: none"> • Adding duct connector • Adding ducting details • Adding symbols • Visibility Configuration | 1-Hour | 04.00 PM – 05.00 PM |

Training Programme Day 2

| Chapter | Topic | Duration | Time |
|------------------|---|-----------------|----------------------------|
| Chapter 7 | Family Pumps based on CAD drawings <ul style="list-style-type: none"> • Importing family-based CAD drawings • Assigning plane • Creating forms using Forms tools • Adding connectors and Pump detailing | 2-Hour | 09.00 AM – 11.00 AM |
| Chapter 8 | Family Air terminals based on CAD drawings <ul style="list-style-type: none"> • Importing family-based CAD drawings • Assigning plane • Creating forms using Forms tools • Adding connectors and Air terminals detailing | 2-Hour | 11.00 AM – 01.00 PM |

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| Chapter 9 | Family Nested Volume Control Damper (VCD) <ul style="list-style-type: none"> • Casing creation using Form tools • Creating blades • Actuator with detailing • Parametric parameters • Adding detailing to nested family • Adding connectors | 2-Hour | 02.00 PM – 04.00 PM |
| Chapter 10 | Introduction to Work-sharing Collaboration <ul style="list-style-type: none"> • Worksets and Worksharing concept • Setting up worksharing • Setting up worksets • Assigning worksets • Updating models among worksets • Synchronization and model updates | 1-Hour | 04.00 PM – 05.00 PM |