## REVIT MEP ADVANCE TRAINING

### Objectives

After completing this guide, you 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 in
- ✓ Create, use, and manage worksets.
- ✓ Publish Revit MEP files to Design Web Format (DWF™) files • Import and export design data using the Industry Foundation Classes (IFC) format.
- ✓ Create working and correct Revit Families for inclusion in Revit Projects, inclusive but not limited to:
  - Mechanical Equipment
  - Lighting Fixtures
  - Air Diffusers

### Pre-requisites

This course is designed for existing Revit MEP users.
It is recommended that you have:

- Basic Mechanical and Electrical design skills.
- Basic Revit MEP skills.
- Completed the Revit MEP Essentials courseware.
- A working knowledge of Microsoft® Windows® 7, Microsoft® Windows® 8 or Microsoft® Windows® 10.

## Chapter 1: Importing and Exporting Files

- About Importing Vector Data
- About Importing 3D Solids and Google SketchUp Files.
- Positioning and Scaling Options
- Importing Raster Data
- Guidelines for Importing and Using External Files
- About Exporting
- Guidelines for Exporting

## Chapter 2: Linking Files

- Overview Lesson: Working with Linked
- About Linked Projects Revit Architecture Projects
- About Managing Shared Coordinates
- About Linked Locations. Acquiring and Reporting Shared Coordinates.
- Guidelines for Working with Linked Projects
- Overview.
- About Project Collaboration
- Guidelines for Monitoring and Coordinating Linked Projects

## Chapter 3: Creating Advanced Components

- Overview
- About In-Place Families
- About Solids and Voids
- Creating 3D Geometry .
- Modifying In-Place Families
- Guidelines for Creating and Modifying In-Place Families
- Overview.
- About Families
- About Component Families
- About the Family Editor
- About Parametric Formulas
- Process of Creating Standard Component Families
- Guidelines for Creating and Modifying Component Families
- Overview
- About Nested Families.
- About Linked Parameters
- Guidelines for Creating Nested Families
- Overview
- About Component Groups
- Placing, Saving, and Converting Component Groups Duplicating and Editing Component Groups
- Guidelines for Working with Component Groups

## Chapter 4: Design and Analysis

- Overview
- About Phases Guidelines for Creating and Using Phases
- Overview About Design Options
- Properties Of Design Options
- Working with Design Option Sets Guidelines for Using Design Options
- Overview
- About Interference Checks
- Guidelines for Checking and Fixing Interference Conditions
- Overview
- About Area Plans
- About Color Schemes.
- Guidelines for Using Area Plans and Color Schemes

## Chapter 5: Revit Worksharing

- Overview
- Process of Project Sharing
- About Worksets
- About the Central File Moving the Central File
- Guidelines for Sharing Projects Using Worksets
- Overview
- About Local Files
- About Editable Worksets
- Worksets Dialog Box
- Process of Removing Users from a Workset
- Using Local Files
- Guidelines for Using Local Files Remotely.

## Chapter 6: Advanced Rendering Techniques

- Overview
- About Materials and Render Appearances
- Process of Using Material Styles
- Editing Render Appearances
- Guidelines for Using Material Styles
- About Nonbuilding Components .
- Overview
- About Lighting
- About Materials
- About Render Quality Settings
- Process of Specifying Settings for Rendering Interior Views
- Guidelines for Rendering Interior Views