

Autodesk® Revit for Fabrication

Brief Synopsis of Class Contents:

This live, instructor-led online class covers the basics of Autodesk Revit MEP with a strong focus on MEP Fabrication. Students will learn about proper project setup, be introduced to the differences between Fabrication Services and Revit MEP Systems, and understand the Revit work-sharing process using central files. Navigation and control of Revit Views will be explained. Students will also learn how to place and work with the LOD 400 content, called Fabrication Items, from the Autodesk Fabrication products (Fabrication CADmep, ESTmep, and CAMduct) within Revit MEP to create coordinated fabrication-intent models.

Learning Objectives:

- Become familiar with the unique aspects Revit brings to Building Information Modeling.
- Understand the fundamental concepts and features of Autodesk Revit MEP.
- Use Revit to design projects and convert to Fabrication for estimating, detailing, and spooling.
- Use the automated documenting tools for projects.
- Develop an initial level of comfort and confidence with Autodesk Revit MEP through learning the terminology and hands-on experience.
- Create an accurate model for detailing within MEP construction firms that reflects the intended installation.
- Learn the process of exchanging models with Autodesk Fabrication products.

Courseware:

Instructor Handouts

Number of Days:

5 Half Day Sessions

Continuing Education Hours:

18 hours

Who Should Attend:

All new users of Revit for Fabrication (MEP), Fabrication Detailers

Prerequisites:

Hardware & Operating System Requirements: A computer that meets the minimum Autodesk requirements for the above software is required.

System and Software Requirements:

<http://www.asti.com/LiveLab-Learning-amp-Training/LiveLab-System-Requirements>

FAQs and Cancellation Policy:

<http://www.asti.com/LiveLab-Learning-amp-Training/LiveLab-FAQS>

Class Outline and Topics:

Introduction to BIM

- Concepts / Parametrics

User Interface

- Ribbon Toolbars
- Project Browser
- View Navigation

View Management

- View Properties
- View Templates
- Discipline / Sub-discipline

MEP Systems (Services)

- System Graphics
- System Browser
- Check Systems (show disconnects)

Documentation and Annotation

- Tags and Schedules
- Sheets and Titleblocks

Project Setup

- Templates
- Content: Families / ITM Parts
- Database configuration
- Linking Models
- Spaces and Zones
- Color Schemes for Duct/Pipe

Worksharing - Live

- Terminology and Theory
- Enable Worksharing (Network vs. C4R)
- Worksets for Disciplines

Mechanical HVAC Modeling

- Duct Types and Systems (Services)
- Mechanical Engineering Settings
- Equipment Layout
- Routing Duct: Manually and Automated
- Sizing Duct and Checking Duct
- Documentation, Sheets and Plotting

Mechanical Pipe Modeling

- Equipment: Hydronic, Plumbing Fixtures, Fire Protection
- Systems for Hydronics, plumbing and fire protection
- Routing Pipe: Manually and Automated
- Pipe Sizing
- Riser views, Sheet views
- Documentation, Sheets and Plotting

Fabrication Categories

Fabrication Configuration

- Connection Indicators
- Reload Configuration
- Add/Remove Services
- Load Profile
- Parts Library

Fabrication Parts Palette

- Group
- Multi-Point Routing
- Exclude from Fill
- Settings
- Parts

Fabrication File Formats

- .itm
- .maj
- .rif

Fabrication Items

- Type Selector
- Type: Default
- Edit Part
- Dimensions
- Connectors
- Rotate Part
- Toggle Connectors
- Show Service

Fabrication Specifications

Fabrication Part Material

Fabrication Insulation Specification

Fabrication Modeling

- Single Item Placement
- Design to Fabrication
- Route and Fill
- Trim/Extend
- Multi-Point Routing

- Exclude from Fill
- Insert Part
- In-Space Tools
- Connect-as-Tap
- Slope
- Change Service
- Change Size

Fabrication Supports

- Supports Category
- Placement
- Unistrut/Trapeze
- Attach to Structure

Fabrication Documentation

- Fabrication Tags
- Fabrication Schedules

Fabrication Reports

- Item Reports
- Ancillary Reports
- Linear Nest Reports
- Worksheets

Fabrication Export

Sheets and Printing

- Setup
- PDF (Vector vs Raster)
- Extensions (Batch Plot)