

Technical Education Services

Autodesk Fabrication CADmep Fundamentals

Course Length: 4 days

The Fabrication CADmep Fundamentals course is designed for HVAC, piping, and plumbing engineers, designers and drafters who want to utilize Fabrication CADmep's unique design features to implement your design from the start of a project to fabricating the materials and getting ready to install in field. Fabrication CADmep has tools to help layout your design using real world parts and pieces with accurate dimensions to make sure you can fabricate your ductwork or piping for your job. In this class, you will get to know the basics of Fabrication CADmep and understand how to navigate and start looking at the basic tools that you can use. You will also get introduced to more advanced tools, such as Design Line, spooling, and reporting. Utilizing the Design Line, you can find a different way to place parts into your drawing. With some other tools, you can look at utilizing Hanger Points to export and use in your project. We will also investigate spooling and creating reports for Fabrication purposes as well as customizing the different settings in Fabrication CADmep.

Upon completion of the course, students will be able to:

- Navigate the User Interface
- Utilize the CADmep Toolbar
- Setup Sections for Elevation
- Use the Attacher Arrow for Inserting Geometry
- Utilize different Commands in Fabrication CADmep
- Annotate in Fabrication CADmep
- Draw utilizing the Fabrication CADmep tool Design Line
- Utilize Point Data information from hangers in the drawing
- Create Reports and Worksheets
- Learn about Spooling to help with the fabrication process
- Customize Fabrication CADmep settings

Prerequisites

- Experience with AutoCAD is recommended.
- An understanding of the concepts of basic design is also highly recommended.
- Please read Chapter 1 and 2 before hand to be ready for the class.

Course description shown for Autodesk Fabrication CADmep 2020. Topics, curriculum, and/or prerequisites may change depending on software version.



Training Guide Contents

Chapter 1: Introduction to Autodesk Fabrication CADmep

- Support Resources for Fabrication CADmep
- Overview of Fabrication Products
- BIM and Fabrication
- Overview of the MEP Fabrication Industry
- Definitions

Chapter 2: Deployment

- Installing Fabrication CADmep
- Check for and Install Latest Service Packs
- Setting up a Shared Database and File Structure
- Migrating an Older Database
- Configuring User Names and Permissions

Chapter 3: User Interface

- The Service Pallet
- Create a New Section
- The CADmep Toolbar
- Right-Click Shortcut Menus

Chapter 4: Sections

- Sections
- Create a New Section
- Make a Section Current
- Understanding How Sections Control Hanger Rod Lengths

Chapter 5: Drawing with the Attacher

- Setting the Systems and Service and setting the Section
- Placing Items from the Service Pallet
- Understanding the Attacher Arrow
- Modifying Placed Items
- Rotating Items about the Attacher Arrow
- Using Fix Relative
- Placing an Item using Fix Relative
- Placing an Item by Rotating the Attacher Arrow
- Using Takeoff as Cut-In
- Using Drop Into Fall
- Fill Between 2 Ends
- Fill with Flex
- Polyline 3D Fill
- Match Object Properties
- Configuring the Multiple Item Properties Command

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- Using the Multiple Item Properties Command
- Carry Over Options Settings
- Filter Selection

Chapter 6: Drawing with Design Line

- Set the Design Line Entry Method for Services
- Fabrication CADmep Design Tools: The Design Line Toolbar
- The Design Line Takeoff Menu
- Using Design Line for an HVAC System
- Understanding How Design Line Works
- Stretching a Design Line
- Using Design Line for a Plumbing System
- Selecting and Activating Design Lines
- The RevDesign Command

Chapter 7: Clash Detection

- RunTime Collision Detection
- Using the Collision Detection Viewer
- Design Line Collision Checks
- Using the DETECT Command

Chapter 8: Importing Revit Content into CADmep

- Exporting Revit Elements
- Import into CADmep

Chapter 9: Drawing Annotation

- Drawing Annotation Settings and Toolbar
- Understanding the Text Utilities Commands
- Item Number Tag Leaders

Chapter 10: Reporting

- The ADDREPORT Command
- Item Reports and Item Report Builder
- Printing Item Report With and Without Previews
- Worksheets and Item Worksheet Builder
- Printing Worksheets With and Without Previews

Chapter 11: Sectional Views

- Create a Sectional View

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Chapter 12: Point Data

- Exporting Point Data
- Viewing Point Data
- Updating the Model with Modified Point Data
- Exporting Point Data to Excel

Chapter 13: Spooling

- Define a Pipe Spool
- Create a Spool Drawing
- Understand Spool Colors

Chapter 14: Exporting to ESTMEP AND CAMDUCT

- Re-numbering Fabrication CADmep Items
- Exporting to Fabrication CAMduct

Chapter 15: Fabrication CADmep Customization

- Edit a Configuration
- Service Setup
- The Hanger Command
- Sub Assembly
- Item Creation
- Convert 3D Model

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Cancellation Policy

The following cancellation policy shall apply to all training engagements, Live Online, Consulting Services and Dedicated/Custom Training:

- Company reserves the right to reschedule or cancel the date, time and location of its class at any time. In the event that a Training Class is cancelled by Company, Customer is entitled to a full refund. Company shall not be responsible for any other loss incurred by Customer as a result of a cancellation or reschedule.
- For Customer cancellations when written notice is received (i) at least ten (10) business days in advance of the class, the Customer is entitled to a full refund of its payment or reschedule enrollment, (ii) less than ten (10) business days, Customer shall not be entitled to a refund, but shall receive a class credit to be used within three (3) months of the date of the original class.
- Student substitutions are acceptable with at least two (2) days prior notice to the class, provided substitution meets course prerequisites and is approved by Company's Training Coordinator (trainingcoordinator@rand.com)
- For all Training orders, cancellation notices must be submitted to trainingcoordinator@rand.com. Company is not responsible for any error in the delivery of the email notice. In the event of any reschedule of Consulting Services and/or Dedicated/Custom Training by Customer, Company will invoice Customer for all non-cancellable travel expenses.

To request more information or to see training locations, visit www.imaginit.com/contact-us.

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