

Technical Education Services

Autodesk Inventor Working with 3D Annotations & Model-Based Definition

Course Length: 1 day

Autodesk Inventor Working with 3D Annotations & Model-Based Definition teaches experienced Autodesk Inventor users how to create 3D annotations to support the visual presentation of annotations and a Model-based Definition (MBD) workflow.

The geometry designed in a 3D CAD modeling environment is created perfectly. During the manufacturing stage, it is not possible to achieve the same perfection. Variations in size, feature location, and orientation are unavoidable. This course instructs how to use the tools in Autodesk Inventor to create 3D annotations that communicate dimensional and GD&T data, hold/thread notes, surface texture requirements, and informational text-based annotations, all of which aim to improve manufacturing accuracy. Additionally, this course explains how you can share your 3D annotated models as 3D PDFs, DWF, STEP files, and Shared Views for use by other software applications, or in 2D drawing views.

Topics Covered

- Creating dimensional annotations.
- Creating hole/thread note and surface texture annotations.
- Creating text-based annotations in a model to communicate additional information.
- Creating tolerance features in a model and using Tolerance Advisor to review it.
- Creating a general profile note annotation.
- Editing 3D annotations in a model.
- Working with Design Views to accurately present the 3D annotations.
- Exporting an annotated model as 3D PDFs, DWF, STEP files, as well as Shared Views.
- Retrieving 3D model annotations into a 2D drawing view.

Prerequisites

Knowledge of GD&T required. The international GD&T standard, ASME Y14.5M-2018, governs how annotations should be added to clearly describe the model's intent. This course assumes that you know how the model is to be annotated and only aims to explain how the annotations are added using the Autodesk Inventor software.

As an introductory course, it teaches experienced Autodesk Inventor users how to create 3D annotations to support the visual presentation of annotations and a MBD workflow. Having a background in creating 3D models using Inventor is highly recommended.

Course description shown for Autodesk Inventor 2021. Topics, curriculum, and/or prerequisites may change depending on software version.



Training Guide Contents

Chapter 1: Getting Started with 3D and Geometric Annotations

- 1.1 Introduction to Annotations
- 1.2 General MBD Overview
- 1.3 The Annotate Interface
- 1.4 Active Standard

Chapter 2: 3D Annotations

- 2.1 Introduction
- 2.2 Dimensional Annotations
- 2.3 Hole/Thread Note Annotations
- 2.4 Surface Texture Annotations
- 2.5 Text-Based Annotations

Chapter 3: Geometric Annotations

- 3.1 Introduction
- 3.2 Tolerance Features
- 3.3 Datum Reference Frames
- 3.4 Tolerance Advisor
- 3.5 General Profile Note

Chapter 4: Sharing 3D Annotations

- 4.1 Displaying 3D Annotations
- 4.2 Exporting 3D Annotations
- 4.3 3D Annotations in Drawings

Appendix A: Additional Practices

Course description shown for Autodesk Inventor 2021. Topics, curriculum, and/or prerequisites may change depending on software version.





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.

Course description shown for Autodesk Inventor 2021. Topics, curriculum, and/or prerequisites may change depending on software version.

