Autodesk Inventor CAM: Introduction to 2D and 3D Milling

Course Length: 2 Days

The Autodesk Inventor CAM Milling Fundamentals course focuses on instructing new users on how to use the Inventor CAM add-on to create milling toolpaths. The course begins with an introduction to the overall Inventor interface and explains how to manipulate your 3D model to change its orientation and view display. Through additional hands-on, practice-intensive curriculum, you will learn the key skills and knowledge required to take the 3D model, set it up in the CAM environment, and assign the 2D and 3D milling toolpaths needed to generate the CNC code required by milling machines.

Topics Covered:

- Navigate the Inventor software interface to locate and execute commands.
- Use the model orientation commands to pan, zoom, rotate, and look at a model.
- Assign visual styles to your models.
- Locate, modify, and create tools in the Tool Library.
- Set up machining operations using Inventor CAM.
- Create 2D Milling, 3D Milling and Drilling toolpaths using the Inventor CAM interface.
- Use the Simulation option to visualize toolpaths.
- Import a tool library.
- Create a toolpath template.
- Post process an Inventor CAM setup to output the CNC code required to machine a model.

Prerequisites:

- As an introductory course, Autodesk Inventor CAM Milling Fundamentals does not assume prior knowledge of Autodesk Inventor CAM. However, this course will not provide instructional content on how to create 3D models using the Inventor modeling tools. Its focus is solely on generating 2D and 3D milling and drilling toolpaths once models are

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

created. The Autodesk Inventor Introduction to Solid Modeling course should be used to learn to create 3D models.

- It is recommended that users have prior experience with the Windows operating system, knowledge of 3D model creation/modification, and an understanding of the CNC milling process.

Learning Guide Contents

Chapter 1: Introduction to Autodesk Inventor CAM

- 1.1 Getting Started with the Autodesk Inventor Interface
- 1.2 Model Manipulation in Inventor
- 1.3 Introduction to Autodesk Inventor CAM
- 1.4 The Autodesk Inventor CAM Interface
- 1.5 Simulating CAM Operations

Chapter 2: Getting Started with Autodesk Inventor CAM

- 2.1 Defining the Setup for Machining Operations
- 2.2 Tool Library
- 2.3 Face Toolpath

Chapter 3: 2D Roughing and Finishing

- 3.1 2D Adaptive Toolpath
- 3.2 2D Pocket Toolpath
- 3.3 2D Contour Toolpath

Chapter 4: Drilling

- 4.1 Drill Toolpath

Chapter 5: Project Exercises I

Chapter 6: 3D Milling

- 6.1 3D Milling Toolpaths

Chapter 7: Project Exercises II

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

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- 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.
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