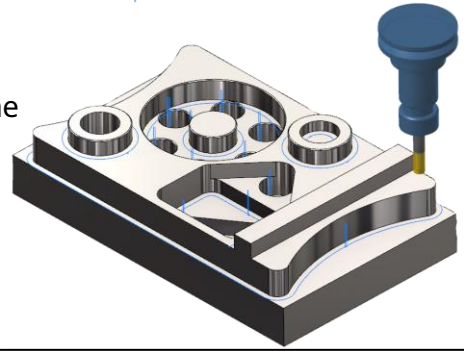


# Mastercam Mill Essentials

## Course Description

This course will focus on establishing a foundation for the user in the Mastercam Mill product to provide all the right tools for continued learning and success. You will learn the critical steps needed to toolpath, verify, and produce code from a digital file to take to the shop floor to produce parts on your machines.



## Method of Instruction

This course is a classroom setting experience with personal handout instructions to be completed by the student.

After completion of the class the students can guide themselves back through each module and refresh their skills by completing the part at their own pace.





















## Objectives

After completing this course, you will be able to:

- Explain and discuss the workflow for creating basic mill toolpaths
- Practice the workflow of taking a model and creating NC code
- Demonstrate proficiency in the Mastercam Mill product
- Articulate the difference between roughing and finishing toolpaths
- Articulate the difference between standard and dynamic toolpaths
- Understand what type of CAD files are available and working through a flow to select a toolpath
- Create basic setup sheets for the shop
- Explain and demonstrate new techniques for toolpaths in Mastercam Mill

## Course Topics

-  Introduction of the Software and the Mill Interface
-  Understanding the different types of CAD files and translators
-  Creating a plane from multiple types of files
-  Creating stock for machining
-  Learning and selecting work origins for different types of CNC machines
-  Learning how to use stock setup for verification
-  Stock setup tools and functions
-  Selecting toolpaths and processes for machining
-  Face toolpath
-  Dynamic Milling (using both profile and solid face selection)
-  Drilling & tapping
-  Contours
-  Pocketing
-  Chamfering
-  Backplot vs. Verify
-  Setup sheets
-  Posting code
-  Exporting operations

## **Course Requirements**

- Mastercam Mill
- Internet Connection for Mastercam University online courses and classes

## **Grading**

Grades will be available from the Instructor Dashboard for assessment questions. Challenge assignments will not be graded in the system and must be reviewed manually or peer reviewed.

## **Course Completion Time**

**Course is a combined minimum of 24 hours in person and/or online meetings.**

Each online course lesson contains video guides, step-by-step documents, challenges, and assessments. Completion time will vary from student to student.

## **Next Steps**

After completion of this course students are encouraged to continue their growth and exploration of the software through the Mastercam Intermediate Mill class.

