

2D MILL COURSE SYLLABUS

COURSE DESCRIPTION

Manufacturing today is rapidly evolving, and staying on the cutting edge is critical for professional development. Mastercam 2019 puts cutting-edge CAM tools just a mouse click away. With the right training, these tools will assist you in manufacturing the future!

This course will provide a foundation in Mastercam 2D milling to start you on the right path to success. You will learn the critical steps needed to take a digital file all the way to the shop floor.

METHOD OF INSTRUCTION

This course was designed to be self-paced. Each lesson contains a set of learning objectives, assessment questions, and challenges to be completed by the student.

OBJECTIVES

After completing this course, you will be able to:

- Explain and discuss the workflow for creating 2D toolpaths.
- Manage the workflow of taking a model and creating NC code.
- Demonstrate proficiency in Mastercam 2019.
- Articulate the difference between standard and Dynamic toolpaths.

COURSE PREREQUISITES

A general understanding of computer knowledge and Windows functionality is required, including file management and website browsing.

COURSE TOPICS / COURSE COMPLETION TIME

Each lesson contains video guides, step-by-step documents, challenges, and assessments. Completion time will vary from student to student. The information provided below is the time required to watch all the content. Questions are provided for each video as well as pre-/post-lesson questions and challenge assignments. Challenge assignments range from 2-15 minutes in length.

1. Introduction – 10 minutes
2. The Mastercam User Interface – 22 minutes
3. Setting up a CAM program – 33 minutes
4. Creating Wireframe Geometry – 25 minutes
5. Basic 2D Operations – 27 minutes
6. Dynamic 2D Operations – 34 minutes
7. 2D Hole Operations – 19 minutes
8. Feature Based Machining – 11 minutes
9. Transforming Operations – 6 minutes
10. Backplot and Simulate Toolpaths – 15 minutes
11. Generate NC Files – 4 minutes
12. Conclusion – 10 minutes

COURSE REQUIREMENTS

- To view the training materials, you need a device with internet access.
- To complete the exercises, you need a PC with Mastercam Mill or Demo/Home Learning Edition installed.

GRADING

If you are taking this course in a school/classroom environment, the assessment grades will be available to your instructor via the instructor dashboard. Challenge assignments will not be graded in the system and must be reviewed manually.

NEXT STEPS

After completion of this course, students are encouraged to explore more advanced toolpath creation. For further training, check out courses including 3D Mill, Mill-Turn, and Mill-Turn in Lathe.

**For more information, visit
UNIVERSITY.MASTERCAM.COM**

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