

MFG 261 : MASTERCAM LATHE

Transcript title

Mastercam Lathe

Credits

4

Grading mode

Standard letter grades

Total contact hours

40

Lecture hours

40

Prerequisites

MFG 100, MFG 110 and MFG 119.

Recommended preparation

MFG 259 and MFG 260.

Course Description

Introduces Mastercam Lathe operational basics. Includes terminology relevant to PC-based CAD/CAM work. Covers the use of the Mastercam Lathe menu structure and system management, 2 1/2 axis wireframe geometry creation, and toolpath creation for output of CNC "G" code for CNC lathe.

Course learning outcomes

1. Explain concepts and demonstrate techniques associated with Mastercam CAD/CAM software for CNC Lathe.
2. Demonstrate fundamental machining operations performed on CNC Lathe machining centers.
3. Demonstrate concepts of generating tool paths using the combined (existing geometry) and direct (new geometry) methods utilizing Mastercam computer assisted machining software for the CNC Lathe.

Content outline

- Graphics environment of Mastercam Computer Assisted Machining Software for CNC Lathe
- CAD drawing import and printing procedures
- Establishment of CAM parameters
- Establishing tooling parameters for CNC Lathe
- Concepts and techniques of modifying existing geometry using Mastercam computer assisted machining software for CNC Lathe
- Tool path generation for CNC Lathe
- Solid model part representations
- Post processing and reverse posting procedures for CNC Lathe
- Exporting data to the CNC Lathe

Required materials

No materials required.