

NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

COURSE SYLLABUS

Course Title: Principals of CNC w/MasterCam

Course #: MFG C205
MFT C6031

Course Description:

This course provides laboratory emphasis on common cutting tools and lathe operations, as well as on associated precision measuring tools and instruments. The labs will involve set-ups and procedures for milling machines, lathes, grinders, drill presses, and measuring instruments.

Co-requisite: MFG 156 or Professor Evaluation of Work Experience.

Goals: To further develop fundamental knowledge of machining. Students learn basic tool room machinery and how to use measuring tools. National Institute of Metal Working Skills credential.

Outcomes:

Students meeting the objectives of this class are able to:

- Navigate Master Cam 2017 menu.
- Create 2D Mill geometry: Lines, Chamfers, Fillets, Arcs, & Circles.
- Change the attributes of entities, Analyze entities, and Create dimensions.
- Define the rough stock setup. Drill holes, Machine contours, and Verify toolpath.
- Transform mirror and copy entities.
- Trim geometry using Divide. Create Drill, Contour and pocket toolpaths.
- Engrave toolpath.
- Create Lathe geometry. Zoom function.
- Create chamfers, fillets.
- Create Lathe toolpaths.