



Wayne County Community College District

COURSE SYLLABUS

NC 231 CNC Turning Center Operation and Graphics I

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

This is a study of CAM graphics as an interface between design and manufacturing from part drawings to finished product. Diverse programming techniques of semi-automatic, MDI and teach mode will be taught. Tooling considerations include offsets, identification, and tool libraries as an integral part of the course work. The student will gain more experience by producing parts from these programs.

PREREQUISITES: NC 222

EXPECTED COMPETENCIES:

Upon completion of this course, the student will be familiar with:

CAD/CAM Objectives:

- Navigate in a CAD/CAM system
- Create and edit tool library
- Rough and finish OD
- Program grooving and drilling
- Import operations
- Use canned cycles
- Thread and flip stock
- Do stock and tail stock advancing
- Program the C-axis

Machine Tool Operation Objectives:

- Load tooling
- Set the coordinate system
- Make machine interface adjustments
- Change tooling according to the program
- Do graphics checks
- Manipulate the machine tool parameters during the run phase

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D



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<60% = E
