

SYLLABUS
PART I
EDISON COMMUNITY COLLEGE
MFG 235S CAM PROGRAMMING
3 CREDIT HOURS

COURSE DESCRIPTION

Computer assisted programming for NC lathes and mills. Program codes, program verification and editing; machine set-up; and part manufacture are covered. Computer assisted manufacturing (CAM) software is utilized for this course. Prerequisite: Grade of C or better in MET 130S and MFG 234S. Lab fee.

COURSE GOALS

The student will:

1. Retrieve geometry from a print or CAD.
2. Edit geometry.
3. Select proper tooling, plan the job, and create tool paths.
4. Post, verify, and edit a program.
5. Set-up a CNC mill and CNC lathe and run a single block, shallow cut run using a CAM program.
6. Produce a part using a complete CAM program on a CNC mill and CNC lathe to design tolerances.

CORE VALUES

The Core Values are a set of principles which guide in creating educational programs and environments at Edison. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE

1. Retrieving Geometry from a Print or CAD
2. Editing Geometry
3. Tool Selection and Job Planning
4. Creating Tool Paths
5. Posting a Program
6. Verifying a Program
7. Editing a Program
8. Setting-up a CNC Mill or CNC Lathe
9. Running a single block, shallow-cut run
10. Making a Part
11. Verifying Tolerances