COURSE SYLLABUS

NC 222   CNC Machining and Programming I

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

Introduction to programming using industry standard numerical control mills and lathe machine. The student will learn a variety of programming techniques and verification methods to produce parts.

PREREQUISITES: *NC 111*

EXPECTED COMPETENCIES:

Upon successful completion of this course, the student will:
1. Write word address programs in absolute and incremental mode
2. Develop programs using tool center and tool edge
3. Use polar and incremental techniques for hole type programs
4. Make a program consisting of slots
5. Write programs using drill canned cycles
6. Use linear and circular interpolation in a program
7. Use a standard CNC program format
8. Apply the use of cutter compensation in a program
9. Operate a CNC mill to make pencil plots
10. Create a sub programs
11. Setup and operate the typical CNC milling machine
12. Input, edit, save and transfer mill programs

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
<60% = E