MACHINIST: COMPUTER NUMERICAL CONTROLS (180 Hours)

Course No.: 79-95-70

COMPETENCY CHECKLIST

Student Name _____

Teacher Name _____ School Site _____

Start Date _____ Completion Date _____ Certificate Date_____

Teacher Signature _____ Student Signature _____

(Signatures verify completion of course competencies)

A. ORIENTATION (2 hrs)
_____ 1. History of & job opportunities in CNC
_____ 2. Course objectives/limits of course coverage

B. BASIC MACHINE SHOP AS APPLIED TO NUMERICAL CONTROLS (18 hrs)
_____ 1. Identify metal coding
_____ 2. Identify various steel alloys
_____ 3. Identify cast iron
_____ 4. Identify aluminum alloys
_____ 5. Describe cutting tools and methods of use

C. NUMERICAL CONTROL EQUIPMENT AND LANGUAGE (4 hrs)
_____ 1. Distinguish between types of lathes
_____ 2. Distinguish types of milling machines

D. OPERATOR RESPONSIBILITIES (12 hrs)
_____ 1. Classify different types of machine tools
_____ 2. Retrofitting of conventional equipment
_____ 3. Explain tolerances
_____ 4. Ways to control possibilities of human error
_____ 5. Explain various coding systems
_____ 6. Compare coordinates
_____ 7. Differentiate language of tape

E. PROGRAMMING (114 hrs)
_____ 1. Describe manuscript preparation operations
_____ 2. Tape preparation/run perforation equipment
_____ 3. Program examples of point-to-point
_____ 4. Verify tape
_____ 5. Demo tape mounting/tool adjustment
_____ 6. Test tool performance
_____ 7. Prepare materials for parts fabrication
_____ 8. Define tape shortage/breakage

F. CONTINUOUS PATH VERSUS POINT-TO-POINT PROGRAMMING (12 hrs)
_____ 1. Tape format versus auxiliary codes

G. QUALITY CONTROL (12 hrs)
_____ 1. Use and care of precision equipment

H. EMPLOYABILITY SKILLS (3 hrs)
_____ 1. Identify potential employers
_____ 2. Sources of employment information
_____ 3. Write a résumé
_____ 4. Prepare applications
_____ 5. Participate in mock interview

I. REVIEW AND EVALUATION (3 hrs)
_____ 1. Pass written tests given
_____ 2. Pass performance tests