Alexandria Technical and Community College

MACH 1502: Basic Machining Processes

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 1
Lab Hours/Week: 4
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

The topics covered in this course are an abbreviated version of Turning I (MACH1530), Milling I (MACH1540), and Grinding I (MACH1550).

B. COURSE EFFECTIVE DATES: 12/12/1997 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Demonstrate proper shop safety using milling and turning machines.
2. Demonstrate proper milling and turning processes.
3. Apply blueprint reading skills to lab projects.
4. Learn basic functions of milling and turning machines.
5. Learn functions and identification of basic cutting tools.
6. Learn how to handle and read basic inspection equipment.
7. Demonstrate basic part inspection techniques.
8. Demonstrate effective problem solving skills.

D. LEARNING OUTCOMES (General)

1. The learner will understand theories and machining operations.
2. The learner will effectively demonstrate machining fundamentals on engine lathes and milling machines.
3. The learner will demonstrate and inspect lathe and mill projects.
4. The learner will demonstrate proper use of a surface grinder and basic setups for safety.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted