Minnesota State College Southeast

MACH 1620: Internship

A. COURSE DESCRIPTION

Credits: 4
Lecture Hours/Week: *.*
Lab Hours/Week: *.*
OJT Hours/Week: *.*

Prerequisites:
MACH 1601 - Introduction to Precision Machining AND MACH 1605 - Engineering Drawings 1 AND
MACH 1610 - Precision Measuring and Gauging AND MACH 1615 - Precision Machining Processes; OR
CPMT 1601 - Introduction to Precision Machining AND CPMT 1605 - Blueprint Reading I AND CPMT
1610 - Precision Measuring and Gauging AND CPMT 1615 - Precision Machining Processes

Corequisites: None
MnTC Goals: None

The Internship is a required course for the "Right Skills Now" certificate of the CNC Machine Tool
program. The internship must be a paid position for the required minimum of 192 hours, and is only
available in the spring semester each school year. A student wishing to apply for Internship must meet
with the Advisor/Faculty who is assigned to the Internship course administration to verify the student GPA
and Attendance qualifications have been met.

The student is responsible for securing an Internship Agreement with a local manufacturing company. The
Faculty may assist with references to companies that are willing to sponsor an internship student. Credits:
4 Credits: 0 lecture/0 lab/ 4 cr OJT (On-the-Job-Training) the credits qualify toward Financial aid
eligibility.

B. COURSE EFFECTIVE DATES: 01/27/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Develop safe and accurate work habits in a manufacturing environment
2. Demonstrate dependable employee behavior
3. Increase CNC machining experience

D. LEARNING OUTCOMES (General)

1. Complete all the required paperwork for the internship application & agreement
2. The student will submit to the instructor a weekly activity report
3. Report to work on time every day
4. Exhibit safe and professional work habits
5. Perform quality and accurate machining
6. Demonstrate an understanding of machining processes order
7. Perform accurate part clamping and set up for CNC machining
8. Perform proper tool set-up
9. Select appropriate speed & feed for tools & materials
10. Use correct measuring tools and processes for inspection
11. Make correct tool offset adjustments in a CNC machine to achieve correct dimensions
12. Keep work area clean and organized
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

The student assessment of successful learning will be the employer and instructor evaluation of the required criteria listed below at a minimum score of 70%.

If the student receives two scores below 70% it will be considered a fail of the internship course. Then the student will be required to take MACH 2642 CNC Precision Machining Application course to complete the diploma.

Instructor verification:
1. _____ The student did complete all required paper work for the Internship application & Employer agreement.
2. _____ The Student did submit all Weekly Activity Reports to the Instructor.

Employer verifications: Employer/Supervisor Please indicate a performance score between 70-100%

A score below 70% is considered failing. A student with 2 scores below 70% will fail the Internship and be required to take MACH 2642 course to earn a diploma.

3. _____ Reports to work on time every day.
4. _____ Exhibits safe and professional work habits.
5. _____ Performs quality and accurate machining.
6. _____ Demonstrates understanding of machining processes order.
7. _____ Performs accurate part clamping and set up for CNC machining.
8. _____ Performs proper tool set-up by choosing the correct tool holder and tools.
9. _____ Selects appropriate speed & feed for tools & materials.
10. _____ Uses the correct measuring tools and processes for inspection.
11. _____ Makes correct tool offset adjustments in a CNC machine to achieve correct dimensions.
12. _____ Keeps work area clean and organized.

This is a Technical Elective option for the CNC Machine Tool program. The internship must be a paid position for the required minimum of 192 hours.

A student wishing to apply for Internship must meet with the Advisor/Faculty who is assigned to the Internship course administration to verify the student GPA and Attendance qualifications have been met.

The student is responsible for securing an Internship Agreement with a local manufacturing company. The Faculty may assist with references to companies that are willing to sponsor an internship student.

Instructor verifications:
1. _____ The student did complete all required paper work for the Internship application & Employer agreement.
2. _____ The Student did submit all Weekly Activity Reports to the Instructor.

Employer verifications: Employer/Supervisor Please indicate a performance score between 70-100%

A score below 70% is considered failing. A student with 2 scores below 70% will fail the Internship and be required to take MACH 2642 course to earn a diploma.

3. _____ Reports to work on time every day.
4. _____ Exhibits safe and professional work habits.
5. _____ Performs quality and accurate machining.
6. _____ Demonstrates understanding of machining processes order.
7. _____ Performs accurate part clamping and set up for CNC machining.
8. _____ Performs proper tool set-up by choosing the correct tool holder and tools.
9. _____ Selects appropriate speed & feed for tools & materials.
10. _____ Uses the correct measuring tools and processes for inspection.
11. _____ Makes correct tool offset adjustments in a CNC machine to achieve correct dimensions.
12. _____ Keeps work area clean and organized.