

COURSE INFORMATION

COURSE PREFIX/NO: **MTT 122**
COURSE TITLE: **Machine Tool Practice I**
LEC HRS/WK: **3.0**
LAB HRS/WK: **3.0**
CREDIT HRS/SEMESTER: **4.0**

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

COURSE DESCRIPTION

This course covers practical experiences using the principles in Machine Tool Theory.

COURSE COMPETENCIES

Module 1 – Engine Lathe

- Discuss and demonstrate lathe safety
- Demonstrate cutting tool grinding
Demonstrate and produce form turning

Module 2 – Threading

- Demonstrate lathe safety
- Demonstrate and produce single point external
- Demonstrate and produce single point internal threading
- Demonstrate and produce thread cutting tool grinding
- Demonstrate and produce threads using a die

Module 3 – Taper Turning

- Demonstrate lathe safety
- Demonstrate and produce external taper turning using the compound rest
- Demonstrate and produce internal taper turning using the compound rest
- Demonstrate and use the taper attachment

MINIMAL STANDARDS/PERFORMANCE OBJECTIVES

Assignments and attendance must be completed as designated in “Evaluation Strategies/Grading.” Criteria for minimal acceptable performance will be provided by the instructor.

REQUIREMENTS:

Attendance Policy

The college attendance policy, stated in the college handbook, will be honored.

Academic Honesty

Students are expected to adhere to the college policy regarding student conduct as stated in the college handbook.

Assignments

Students are expected to complete all assignments and any supplementary exercises designated by the instructor.

Projects

Students are expected to complete all labs and any supplemental exercises designated by the instructor.

EVALUATION STRATEGIES/GRADING

Students will be expected to complete written tests and projects as specified by the instructor. An average score of 60% will be required on tests, projects, and homework.

The final grade for MTT 122 will be determined as follows:

Module 1	15% of final grade
Module 2	15% of final grade
Module 3	15% of final grade
Lab projects	35% of final grade
Work Attitude	10% of final grade
Cleanup	10% of final grade

Work Attitude is defined as:

Participation	Responsibility
Cooperation	Professionalism
Appearance	Attendance

Grading scale will be:

- A 90 -100
- B 80 - 89
- C 70 - 79
- D 60 - 69
- F 0 - 59

CRITERIA FOR LAB PROJECTS

- A Student completes all projects correctly without assistance.
- B Student completes all projects correctly with minimal assistance from instructor.
- C Student completes all projects with constant assistance from instructor.
- D Student does not complete all projects with or without assistance.
- F Student does not attempt to complete projects with or without assistance.

EVALUATION CRITERIA FOR LAB PROJECTS

Projects must be machined within specified tolerance.
Projects must be neat in appearance.
Projects must be free of burrs.

ENTRY LEVEL SKILLS:

The student should be able to read, write, and do simple arithmetic.

PREREQUISITES/CO-REQUISITES:

Prerequisites:

RDG 031 or equivalent

Co-requisites:

None

Effective: SU2006