



South Central College

MTT 1240 Applications I

Course Outcome Summary

Course Information

Description	In this course, students will have the opportunity to continue to develop their skills on the lathe and mill with practical hands-on experiences in a lab setting. A continuation of set-up, operation and safety of lathe and mill will be reinforced in this course. (Prerequisites: MTT 1110 and MTT 1120)
Total Credits	3
Total Hours	96

Types of Instruction

Instruction Type	Credits/Hours
Lab	3/96

Pre/Corequisites

MTT 1110 and MTT 1120

Institutional Core Competencies

Communication - Students will be able to demonstrate appropriate and effective interactions with others to achieve their personal, academic, and professional objectives.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

- 1. Explain the functions and parts of the lathe**
Learning Objectives
Identify all the parts of a lathe and mill
Demonstrate the function of each part of a lathe and mill
- 2. Demonstrate comfort with various toolholding devices**
Learning Objectives
Identify a variety of toolholding devices

Learning Objectives

Describe roughing operations

Describe finishing operations

Utilize appropriate operation for a given task

4. Describe the different classes of fit

Learning Objectives

Identify classes of fit

Apply class of fit to a lathe and mill task

5. Exhibit lathe and mill safety precautions

Learning Objectives

Identify processes in place to ensure safety on the lathe and mill

Practice safe use and maintenance of the lathe and mill

6. Practice use of precision measurement hand tools

Learning Objectives

Explain use of various hand tools

Select proper tools for machining operation

Demonstrate precision measurement tool use skills

7. Perform calculations required for lathe projects