



South Central College

MTT 1150 Machining Computations

Common Course Outline

Course Information

Description This course is designed to provide foundations of the mathematical processes used in the technical field of machine tool practices. Topics will include arithmetic, algebra, geometry, trigonometry, and applications. (Prerequisite: Declare MTT as a major.)

Total Credits 1

Total Hours 16

Types of Instruction

Instruction Type	Credits/Hours
Lecture	1/16

Pre/Corequisites

Declare MTT as a major.

Institutional Core Competencies

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 Outcomes

1. Review fractions

Learning Objectives

Divide and multiply fractions

Add and subtract fractions

2. Identify signed numbers

Learning Objectives

Add and subtract signed numbers

Multiply and divide signed numbers

3. Review decimals

Learning Objectives

Identify place values of decimals
Define decimal places with machinist language

4. Solve diagrams using the Laws of Sine and Cosine

Learning Objectives

Define three trig functions
Solve right triangle with trig functions

5. Solve tolerances

Learning Objectives

Calculate upper and lower limits
Identify uni-lateral and bi-lateral tolerances

6. Solve formulas for a given variable

Learning Objectives

Apply the order of operations
Solve English-Metric conversions

SCC Accessibility Statement

Disability Services provides accommodations and other supports to students with permanent and temporary disabilities that affect their SCC experience. Disabilities may include mental health (anxiety, depression, PTSD), ADHD, learning disabilities, chronic health conditions (migraine, fibromyalgia), sensory disabilities, and temporary disabilities (broken arm, surgery). Common accommodations are extended test time, private room for testing, audiobooks, and sign language interpreter.

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