



South Central College

MTT 1230 Quality Assurance I

Course Outcome Summary

Course Information

Description	This course combines the use of precision inspection equipment, calibration of inspection equipment, methods of use for inspection equipment, print clarification and the basics of Geometric Dimensioning and Tolerancing (GD&T). (Prerequisites: MTT 1130 and MTT 1140)
Total Credits	2
Total Hours	48

Types of Instruction

Instruction Type	Credits/Hours
Lec	1/16
Lab	1/32

Pre/Corequisites

MTT 1130 and MTT 1140

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. Determine quality requirements

Learning Objectives

Identify machining symbols
Interpret abbreviations

2. Identify quality control methods

Learning Objectives

List quality assurance tools
List areas of quality

3. Explain title block

Learning Objectives

Interpret print scale
Define tolerances

4. Identify threads

Learning Objectives

Measure threads
Explain thread geometry

5. Perform dimensioning

Learning Objectives

Define allowances
Define size limits

6. Perform multiview sketch

Learning Objectives

Identify center lines
Explain third-angle projection

7. Measure with micrometers

Learning Objectives

Measure diameters
Demonstrate calibrating micrometer

8. Measure with pin gauges

Learning Objectives

Identify go and no go size limits
Explain types of fits

9. Measure with indicators

Learning Objectives

Measure run out
Measure concentricity

SCC Accessibility Statement

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: www.southcentral.edu/disability

This material can be made available in alternative formats by contacting the Academic Support Center at 507-389-7222.