



South Central College

## AGME 1821 Precision Measuring Tools

### Common Course Outline

#### Course Information

<b>Description</b>	This course covers using precision tools. The student will learn to use micrometers and vernier calipers both English and Metric, torque wrenches, small hole and telescoping gauges, dial bore gauges, steel, iron and wire gauges, feeler gauges, thread pitch gauge and plastigauge. They will also learn to single flare and double flare, proper use of tap and die installing heli coil and keen-sets to restore threads.
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<b>Total Credits</b>	1
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<b>Total Hours</b>	16
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#### Pre/Corequisites

NONE

#### Course Outcomes

**1. Identify measuring equipment.**

**Learning Objectives**

- Read English and metric micrometers.
- Read English depth micrometers.
- Read English and metric Vernier calipers.
- Read dial indicator.
- Use small bore gauge.
- Use snap gauge.
- Use dial bore gauge.
- Use plastigauge.

**2. Identify torque wrenches.**

**Learning Objectives**

- Use inch pound torque wrench.
- Use foot pound torque wrench.
- Adjust and use electronic torque wrench.
- Use beam type torque wrench.
- Use Newton meter torque wrench.
- Use micrometer style torque wrench.
- Calculate torque when using speciality attachments.

**3. Identify flaring and threading tools.**

**Learning Objectives**

Perform a single flare.  
Perform a double flare.  
Perform metal tapping skills.  
Perform metal threading skills.  
Install a helicoil.  
Install a keen-sert.

### **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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