# **MFG 203: LAYOUT**

### **Transcript title**

Layout

#### **Credits**

2

# **Grading mode**

Standard letter grades

#### **Total contact hours**

60

#### Lab hours

60

# **Prerequisites**

instructor approval.

## **Recommended preparation**

MFG 100.

# **Course Description**

Semi-precision and precision layout practices. Includes height gauge operations, surface plate set-ups, bolt circle layout, and the use of hand and power tools to produce accurate workpiece profiles.

# **Course learning outcomes**

- 1. Student will setup measuring activities using the height gage to measure part steps to within .001".
- 2. Student will accurately solve layout problems that demonstrate ability to perform right angle trigonometry calculations.
- 3. Student will perform accurate tangency and radii layouts to within .015".
- 4. Student will setup and perform angle measurements using the sine bar and gage blocks.
- 5. Student will use the combination set to scribe semi-precision layouts to within .015".
- 6. Student will use the radius gage set to determine size and shape conformation for rounded part edges.