# 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.