# **MFG 202: METALS PREPARATION**

## **Transcript title**

Metals Preparation

### **Credits**

2

# **Grading mode**

Standard letter grades

#### **Total contact hours**

60

#### Lab hours

60

# **Prerequisites**

instructor approval.

## **Recommended preparation**

MFG 100.

## **Course Description**

Bandsaw, cold saw auto stop operations, ironworker hole punching and abrasive power tool operations. Includes safety, profile cutting, shearing, material identification, blade welding, blade selection and offhand grinding operations.

## **Course learning outcomes**

- 1. Student will safely setup and operate the horizontal band saw.
- 2. Student will calculate blade length for different size band saws.
- 3. Student will demonstrate ability to cut within 1/32" of line profiles using the horizontal band saw.
- 4. Student will setup and perform cutting and punching operations with the Iron Worker.
- 5. Student will correctly identify commonly used fabrication metals.

### **Content outline**

- · Machine safety
- · Band saw blade terminology and selection
- ${\bf \cdot}\,$  Calculation of blade lengths for band saw blades
- Horizontal band saw setup and cutting operations
- · Iron worker setup, shear, and punch
- · Profile cutting
- · Material markings and identification

### **Required materials**

Requires textbook and special gear, see syllabus for details.