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# MFG 203 - MANUF/ ENGINEERING PROCESSES

## **Course Description**

The Manufacturing and Engineering Processes course will provide students with an overview of various processes used in the design and development of new products. Students will be introduced to the engineering steps and processes required to take a product from concept through production. This is a project-based class in which students will design and fabricate a component aligned with their area of interest. Group 2 course.

## **Credit Hours**

3

## **Contact Hours**

4

### **Lecture Hours**

2

## **Lab Hours**

2

# **Required Prerequisites**

DD 170, ENG 99/108, MTH 23

# **General Education Outcomes supported** by this course

Critical Thinking - Direct

# **Course Learning Outcomes**

### Knowledge:

 Define and identify the design processes used to fabricate a component from concept to production.

### Application:

 Apply engineering design principles to the fabrication of a component, differentiating between the various manufacturing processes.

### Integration:

 Integrate design principles and technical skills to fabricate a component.

### **Human Dimension:**

 Collaborate with a team, recognizing their role within design and fabrication processes.

### Caring - Civic Learning:

 Reflect on the impact of various manufacturing processes and their impact on society.

### **Learning How to Learn:**

 Research/select the best method required to design and fabricate a component.