

MFG 161 : CAPSTONE PROJECT I

Transcript title

Capstone Project I

Credits

3

Grading mode

Standard letter grades

Total contact hours

60

Other hours

60

Course Description

Provides opportunity for students to showcase skills and knowledge achieved in the first year of the Manufacturing Technology Machining Pathway, by creating an assembly of toleranced parts complete with process plans, drawings, and a bill of materials.

Course learning outcomes

1. Demonstrate safe practices while using the MATC Machining Lab.
2. Demonstrate the use of precision measuring tools by checking parts for accuracy.
3. Create a project folder that includes drawings with tolerances, process plans, and bills of materials.
4. Produce a completed assembly to the specifications described in industry standard blueprints and documents.

Content outline

1. Project options
2. Manufacturing philosophy and design intent
3. Outline projects using CAD programs or hand drawings, process plans, and a bill of materials
4. Manufacture parts using various machining processes
5. Assemble and inspect parts using precision machining tools

Required materials

See syllabus.