

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. Apply safe practices in an industrial manufacturing setting.
2. Apply system of fits, tolerances, and assemblies in manufacturing.
3. Organize and document class project with the use of toleranced drawings, process plans and a bill 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 computer-aided design (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

Please see syllabus for details.