

EIN3390L MANUFACTURING PROCESSES LAB

ABET-Related Objectives (Accreditation Board for Engineering and Technology (ABET))

- Demonstrate abilities to design and integrate systems.
- Demonstrate leadership, communication, and teamwork skills.

ABET-Related Outcomes – General

- Apply knowledge of mathematics, science and engineering.
- Function in multidisciplinary teams.
- Communicate effectively.
- Use the techniques, skills and modern eng. tools for eng. practice.
- Integrate processes involving people, material, equipment, information, & controls.

Specific Class Objectives:

- To show how design intent plays a major role in the final outcome and cost of a manufactured part.
- To demonstrate how a component get routed through the manufacturing process.
- To demonstrate tolerances and the basics of Fit , Form and Function.
- Students will learn the importance of manufacturing efficiency.
- To introduce students to common tools used in manufacturing.
- To introduce students to machining methods used in manufacturing.
- Allow students to gain working knowledge of common manufacturing equipment and apply them by means of hands on projects.
- To introduce students to CNC programming that is common to the industry.
- To learn and apply common CNC techniques.