Introduction to Manufacturing Engineering

ISE 2500

Credit Hours:

3.00 - 3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Lab

Course Description:

Fundamentals of common manufacturing processes, materials and tooling; relationship of product design to required processing sequences and steps, attributes of manufacturing systems.

Course Goals / Objectives:

- Specify manufacturing processes and sequences to manufacture a given product
- Identify the key parameters and attributes of basic manufacturing processes
- Identify tooling and equipment required for manufacturing and inspection processes
- Define basic manufacturing system attributes such as set-up time, lead time, down time, idle time, cycle time, and makespan

Course Topics:

- Manufacturing processes, materials, tooling, and equipment.
- Influence of product design on process selection and sequence.
- Attributes of manufacturing systems.

Designation:

Elective

Required