

ME Capstone Design I: Product Design Capstone

MECHENG 4906.01

Credit Hours:

2.50

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

First course of 2-semester senior capstone series. Students begin to work on their design project. Emphasis on problem definition, requirements, design proposal.

Prerequisites and Co-requisites:

Prereq: 3360, 3671, and 3870. Prereq or concur: 4510 and 5682.01, and enrollment as a MechEng-BS Student, or permission of instructor.

Course Goals / Objectives:

- Student will understand design as a process.
- Students will apply core engineering skills to the design process.
- Students will appreciate the challenges and complexity of the design process.
- Students will appreciate design as a process for taking an idea or need from concept to realization of a deliverable (component, system, process).
- Students appreciate design as the culminating ability and skill arising from their studies.

Course Topics:

- Definition of problem and design specifications
- Professional codes and standards applicable to design problems defined
- Analysis of literature germane to topics chosen
- Separate design down into manageable subsystems
- Report requirements and general communications

ME Capstone Design I: Product Design Capstone - 2/2

Designation: Required