

Multidisciplinary Engineering Capstone Design Project II

ENGR 5902.01

Credit Hours:

3.00 - 3.00

Course Components:

Lecture

Lab

Course Description:

An integrated sequence constituting a multidisciplinary engineering capstone design experience which will utilize principles of multiple engineering disciplines for sponsored design projects. Sequenced with 5901.01.

Prerequisites and Co-requisites:

Prereq: 5901.01, or permission of instructor.

Course Goals / Objectives:

- Apply elements of the design process: Identify the problem; Create functional requirements; Conceptualize solutions and refine; Design a solution to meet the specifications; Build or model a prototype; Create and implement a validation plan
- Demonstrate technical communication skills: Apply oral communication skills; Demonstrate formal and informal written forms of communication; Demonstrate communication skills at all levels within a company structure
- Participate in multidisciplinary design teams: Implement project management tools; Identify and practice leadership skills; Identify roles and responsibilities of team members; Demonstrate ability to communicate and integrate ideas
- Demonstrate professional practices: Professional and ethical judgment; Documentation and cost; Use contemporary tools; Protection of intellectual property; Incorporate global, economical, environmental, and societal impacts