

ME Capstone Design II: Assistive Devices

MECHENG 4905.02

Credit Hours:

2.50

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

Second course of 2-semester senior capstone series. Complete work on assistive devices for persons with disabilities. Emphasis on detailed design, prototype, evaluation, and documentation.

Prerequisites and Co-requisites:

Prereq: 4905.01, and enrollment as MechEng-BS student (No ME pre-majors can enroll in this course); or permission of instructor.

Course Goals / Objectives:

- Develop detailed drawings for assistive device
- Fabricate final design
- Test final design and interpret data
- Prepare a detailed design report on final product
- Prepare user's manual on final design
- Deliver an oral presentation explaining the project

Course Topics:

- Solid modeling and tolerancing applied to assistive devices
- Fabrication resources and techniques
- Experimental design and data interpretation
- Examples of engineering analysis for design
- Expectations for professional written and oral reports

ME Capstone Design II: Assistive Devices - 2/2

Designation: Required