

Design and Professional Practice II, Biomedical

MATSCEN 4382.02

Credit Hours:

3.00 - 3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

Second course in a two-course MSE Senior Design sequence with a biomedical engineering emphasis. Applying design principles; challenges of biomedical device design; engineering and testing devices that focus on helping persons with disabilities.

Prerequisites and Co-requisites:

Prereq: 4381.02, and enrollment as MatSEng-BS major; or permission of instructor.

Course Goals / Objectives:

- Students will be able to design and build a device by working in a team on a project to aid clients with disabilities
- Students will be able to abstract engineering specifications from clinical needs
- Students will be able to implement, manage, and document the engineering design process
- Students will be able to make a professional presentation and write a technical team report.

Course Topics:

- Build Devices
- Design team updates and meetings
- Test Devices

Designation:

Required