

# **Design Principles and Biomedical Research at Nanjing University**

## ENGR 5797.19

**Credit Hours:** 3.00 - 3.00

### **Course Components:**

Field Experience

#### **Course Description:**

Internationalized medical device design course. Introduction to design principles; needs finding, idea generation, and presentation of projects that focus on helping persons with medical based problems. Documentation and technical skills are developed throughout the course. Activities in team-building, cultural awareness and global engineering are emphasized throughout the course.

#### Prerequisites and Co-requisites:

Prereq: Math 2177, or 2174, or 2255 and 2568, or 2415 and 2568, or for CSE students 2568; Jr or Sr standing in the College of Engineering; and permission of instructor.

#### **Course Goals / Objectives:**

- Students will work effectively in cross-cultural teams, including communication. Students will learn engineering skills and device testing methods.
- Students will be able to take a problem from idea to drawing and physical prototype form using modern engineering tools. Students will develop the cultural perspective and identify skills of other team members to solve design problems.