**BE  307LR - 000   Biomedical Circuits and Signals**

Designed for BE juniors. Explores fundamental knowledge of biological signals and the circuitry and software used to acquire, analyze, and process these circuits and signals. Reviews basic properties of signals and systems, develops an in-depth knowledge of electronic circuit design, and exposes students to problem-oriented design with special emphasis on problems particular to biomedical applications, and integrates the physiological concepts with electronic design to prepare the students for solving problems in any area of biomedical engineering. Teaches LabView, a graphical programming tool for virtual instrumentation. Students will develop skills to analyze, design, and build both real and virtual instruments for biomedical research applications and prototyping of medical devices.

**BE  500LEC - Special Topics (Introduction to Biomedical Optics and Ultrasound)**

This course is designed for BME seniors and graduate students. This course content covers the fundamentals of biomedical optics and ultrasound and their applications in medical imaging and therapy