BME 322: Sensors and Nanodevices in BME

Biomedical Engineering

Introduction to fundamentals and major types of sensor systems, scaling laws of device, miniaturization, and detection mechanisms, including molecular capture mechanisms; electrical, optical, and mechanical transducers; micro-array analysis of biomolecules; semiconductor and metal nanosensors; microfluidic systems; and microelectromechanical systems (MEMS, BioMEMS) design, fabrication and applications for biomedical engineering.

3 Credits

Prerequisites

- BME 311: Biomechanics $target.descriptions.MinimumGrade$

Instruction Type(s)

- Lecture: Lecture for BME 322

Subject Areas

- Bioengineering and Biomedical Engineering

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