

EE505 MEMS Sensors and Actuators

Text: Foundation of MEMS
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Office Hours: M 9pm & W 10pm, by appointment

Prerequisites:

EE409 or permission from instructor

Course Outline

Microfabrication

- Lithography

- Etching

- Deposition

- Oxidation/Diffusion

Mechanical Transducers

- Basic Mechanics

- Capacitive Actuators

- Magnetic Actuators

- Thermal Actuators

Physical Sensors

- Strain

- Temperature

- Piezo

- Bimorph

- Inertial

Optical MEMS

RF MEMS

Bio-Chemical MEMS

Grading: Midterms, Homework, Literature Review Paper, Lab Report