

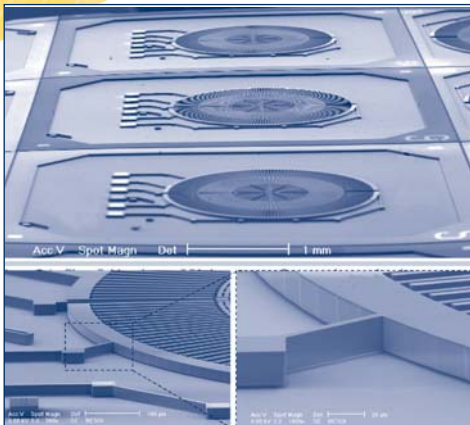
EECS 414: Introduction to MEMS

Credits: 4

Prerequisite: Undergraduate courses in physics and math

Distance Learning Option

Designed to teach the fundamentals of devices and systems, this class is the first in a five-class structure teaching integrated microsystems and microelectromechanical systems (MEMS). It covers micromachining and microfabrication techniques, sensing and transduction mechanisms, and design and analysis of devices and systems. Undergraduate seniors and graduate students who are not familiar with MEMS, microfabrication, micromachining, and devices and systems are this class' target.



Silicon-on-Insulator (SOI) angular accelerometer fabricated with a Deep Reactive Ion Etch (DRIE) process.



Instructor:

Professor Khalil Najafi received the BS, MS, and the PhD degrees in 1980, 1981, and 1986, respectively, all in electrical engineering from the Department of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, MI. From 1986 to 1988, he was employed as a research fellow; from 1988 to 1990, as an assistant research scientist; from 1990 to 1993, as an assistant professor; from 1993 to 1998, as an associate professor; and since September 1998 as a professor and the director of the Solid-State Electronics Laboratory in the Department of Electrical Engineering and

Computer Science at the University of Michigan. In 1998, he was named the Arthur F. Thurnau Professor and received the College of Engineering's Research Excellence Award. He is a Fellow of the IEEE.