

NE - Nanoengineering

Nanoengineering: NE

Lower-Division Courses

Upper-Division Courses

Graduate Courses

NE 380. Introduction to Nanoengineering.

Restricted to nanoengineering majors. Survey fundamental and important areas in nanoengineering including semiconductor device design, semiconductor manufacturing techniques, metrology and process control. Three lecture hours a week for one semester
Prerequisite: Graduate standing.

NE 380C. Topics in Nanoengineering.

May be repeated for credit when the topics vary.

NE 381. Nanofabrication.

Restricted to nanoengineering majors. Explore a theoretical and practical introduction to contemporary nanofabrication techniques and methods. Three lecture hours a week for one semester
Prerequisite: Graduate standing.

NE 382. Nanodevices.

Restricted to nanoengineering majors. Examine the design and physics underlying modern semiconductor devices. Three lecture hours a week for one semester. Prerequisite: Graduate standing.

NE 390. Nanofabrication Laboratory.

Restricted to nanoengineering majors. Explore how to operate nanofabrication tools in the cleanroom. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Graduate standing.

NE 391. Nanometrology Laboratory.

Restricted to nanoengineering majors. Explore various different metrology techniques for analyzing nanoscale materials and structures. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Graduate standing.

NE 395. Introduction to Nanoengineering Research.

Restricted to nanoengineering majors. Prepare for an independent research project in nanoengineering through developing literature review and technical writing skills. Three hours of lecture a week for one semester. Prerequisite: Graduate standing.

NE 398R. Master's Report.

Restricted to nanoengineering majors. Prepare a report to fulfill the requirement for the master's degree. Three hours of lecture a week for one semester. Prerequisite: Graduate standing.

Professional Courses