Nanoengineering

The Master of Nanoengineering (MNAE) is an on campus and distance education program and is designed for students with an undergraduate degree in a science or engineering discipline who wish to pursue a graduate degree in nanoengineering. The field of nanoengineering is expected to revolutionize technology and improve quality of life, particularly as related to energy, environment, and health. Students will achieve an understanding of the fundamental advantages in nanoscale materials, devices and systems. It is a 30 credit hour degree program that does not require a thesis, final oral exam or on-campus residency. GRE scores are recommended but not required. NC State has an existing strength in nanostructured materials and devices.

Students can declare a concentration in one of the following three areas:

1. Materials Science in Nanoengineering;
2. Nanoelectronics and Nanophotonics; or
3. Biomedical Sciences in Nanoengineering.

This program is appropriate for distance-education Masters students.

Admission Requirements
In addition to the general admission requirements as set by the Graduate School, the MNAE program requires a BS degree in science or engineering with a minimum GPA or 3.0. Non-native English speakers also require a minimum TOEFL or IELTS scores as established by the Graduate School.

Degree Requirements
The Master of Nanoengineering (MNAE) requires 30 credit hours of coursework only. The 30 credit hours must consist of 12 credit hours of core courses, 12 credit hours in the areas of concentration and 6 credit hours of technical electives.

Other Relevant Information
The Master of Nanoengineering program is an interdisciplinary one that is comprised of courses taught by faculty from six different departments within the College of Engineering.

Degrees

- Nanoengineering (MR) (http://catalog.ncsu.edu/graduate/engineering/nanoengineering/nanoengineering-mr/)
- Nanoengineering (MR): Biomedical Sciences in Nanoengineering Concentration (http://catalog.ncsu.edu/graduate/engineering/nanoengineering/nanoengineering-mr-biomedical-sciences-concentration/)
- Nanoengineering (MR): Materials Science in Nanoengineering Concentration (http://catalog.ncsu.edu/graduate/engineering/nanoengineering/nanoengineering-mr-materials-science-concentration/)
- Nanoengineering (MR): Nanoelectronics and Nanophotonics Concentration (http://catalog.ncsu.edu/graduate/engineering/nanoengineering/nanoengineering-mr-nanoelectronics-nanophotonics-concentration/)

Full Professors
Charles M. Balik
Albena Ivanisevic
Thomas H. LaBean
Jagdish Narayan
Joseph B. Tracy
Daryoosh Vashaee
Yaroslava G. Yingling
Yong Zhu

Associate Professors
Rajeev Kumar Gupta

Assistant Professors
Kaveh Ahadi
Wenpei Gao
Srikanth Patala

Practice/Research/Teaching Professors
Claude Lewis Reynolds Jr.

Emeritus Faculty
Elizabeth Carol Dickey