

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.

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.

Nanoengineering Program Website

Distance Website

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 of 3.0. Non-native English speakers also require a minimum TOEFL or IELTS scores as established by the Graduate School.

Applicant Information

- **Delivery Method:** On-Campus, Online, Hybrid
- **Entrance Exam:** None
- **Interview Required:** None

Application Deadlines

- **Fall:** January 15
- **Spring:** August 1
- **Summer 1:** March 25

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 Vashaei

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