Students currently enrolled at Louisiana Tech or transfer students entering beyond the freshman level should complete the Nanosystems Engineering Program application available at the program website (www.coes.latex.edu/nano) and submit it to the Nanosystems Engineering Program. Transfer students must also apply to transfer to Louisiana Tech through the university’s Admissions Office. Questions about the application process may be directed to the program chair, Dr. Hisham Hegab.

Freshmen wishing to pursue the nanosystems engineering degree should apply directly to the university’s Admissions Office (www.latex.edu/admissions). All freshmen engineering majors take a common set of courses during their first year. Since enrollment in the nanosystems program is limited, entering freshmen are not allowed to declare nanosystems engineering as their major until the spring of their freshman year after completing an application process to the program.

“Out vision is to be the best college in the world at integrating engineering and science in education and research.”

Dr. Stan Napper - Dean
College of Engineering and Science
Louisiana Tech University

B.S. Engineering & Science Programs

- Biomedical Engineering
- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science
- Construction Engineering Technology
- Electrical Engineering
- Electrical Engineering Technology
- Industrial Engineering
- Mathematics
- Mechanical Engineering
- Nanosystems Engineering
- Physics
Why Study Nanosystems Engineering at Louisiana Tech?

This pioneering degree prepares engineers for the new industrial revolution. It is the first degree of its type in the United States. Louisiana Tech has a unique set of resources in its faculty and facilities to offer this program. Graduates will be equipped to immediately start working in a variety of scientific and engineering professions. These graduates will play a leading role in the future as nanotechnology grows, matures, and renews its full potential.

The Nanosystems Engineering Program draws on the strengths of all the basic sciences and the College’s Integrated Freshman and Sophomore Engineering curricula. The upper level portion of the curriculum provides specialized courses in nanotechnology materials, measurements, and fabrication techniques as well as a capstone experience on a nanosystems engineering project. The degree program offers the choice to include an engineering application focus from biomedical, chemical, electrical, mechanical, and microsystems engineering.

What career opportunities are available?

Graduates with a nanosystems engineering degree will have many opportunities at the boundaries of traditional engineering due to the cross-disciplinary nature of their degree. We expect that many of our graduates may choose to pursue research-based careers by going on to graduate study or working at government laboratories and/or research centers. Graduates who wish to work in a commercial environment will find ever-expanding opportunities in one of the many new nanotechnology companies. The National Science Foundation has estimated that nanotechnology companies will create more than 100,000 new jobs in the United States during the next 10 years. Graduates will be equipped to immediately start working in a variety of scientific and engineering professions. These graduates will play a leading role in the future as nanotechnology grows, matures, and renews its full potential.

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Nanosystems Engineering

Nanosystems Engineering is science at the molecular level. Like biotechnology and information technology, it is a growth industry with the potential to greatly change the world in which we live. Nanosystems engineering can be considered the branch of engineering that deals with materials and systems smaller than 100 nanometers (1 nanometer is a billionth of a meter), especially with the manipulation of individual molecules.

B.S. in Nanosystems Engineering

Fast Facts:

- Engineering degree with emphasis on nanotechnology and its engineering applications
- 127 SCH program that utilizes the Integrated Freshman and Sophomore Engineering curricula
- Degree has stronger emphasis in sciences (e.g., chemistry & physics) than most other engineering programs
- Program includes choice of concentration tracks in biomedical, chemical, electrical, mechanical, and microsystems engineering

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