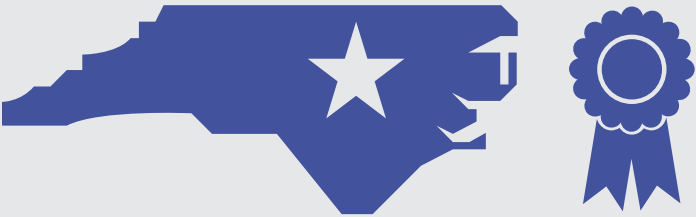


**7<sup>th</sup>** in online graduate engineering programs in the U.S.  
*U.S. News & World Report*

**20+** research centers, institutes and laboratories

**198** million in annual research expenditures in 2018-19



**grad.ncsu.edu**



**12<sup>th</sup>** in graduate ranking among public engineering colleges  
*U.S. News & World Report*



**NC STATE** Engineering

**GRADUATE PROGRAMS**

**WHY NC STATE?**

**The College of Engineering at NC State** is one of the world's finest engineering and computer science schools and is dedicated to creating an environment in which our faculty and students can excel.

We are known nationally for innovative degree offerings and groundbreaking collaborative research initiatives. With advanced computing resources, state-of-the-art facilities, and a world-class faculty, the College integrates education and research giving our graduate students opportunities to solve real-world problems in classroom, field and laboratory settings.

Ever-changing technologies make this an exciting time for a career in engineering, and NC State knows how to prepare students for those careers. With more than **3,000** graduate students, **the College is the largest** at NC State, offering **21** master's and **13** doctoral degree programs, as well as a variety of graduate certificates. Many of our programs can be completed online.

Students who choose the College of Engineering at NC State for their education choose **success**.

**3,000+**  
graduate students enrolled



**Top 20** in graduates considered most desirable by job recruiters  
*Wall Street Journal*

**300+**  
Employers participate in our annual career fairs





GRADUATE PROGRAMS

	Certificate	Master's	Ph.D.
<b>Biomedical Engineering</b>			
Biomedical Engineering			
Nanobiotechnology			
<b>Biological and Agricultural Engineering</b>			
Biological and Agricultural Engineering			
<b>Biomanufacturing</b>			
Biomanufacturing			
Downstream Biomanufacturing			
Upstream Biomanufacturing			
<b>Chemical and Biomolecular Engineering</b>			
Chemical Engineering			
<b>Civil, Construction, and Environmental Engineering</b>			
Civil Engineering			
Environmental Engineering			
<b>Computer Science</b>			
Computer Science			
Computer Networking			
Data Science Foundations			
<b>Engineering</b>			
Engineering			
<b>Electrical and Computer Engineering</b>			
Electrical Engineering			
Computer Engineering			
Computer Networking			
Electric Power Systems Engineering			
Nano-Systems Engineering			
Renewable Electric Energy Systems			
ASIC Design & Verification			
<b>Industrial and Systems Engineering</b>			
Industrial Engineering			
Engineering Management			
Dual Master of Industrial Engineering/Master of Business Administration			
Integrated Manufacturing Systems Engineering			
<b>Materials Science and Engineering</b>			
Materials Science and Engineering			
Nanoengineering			
<b>Mechanical and Aerospace Engineering</b>			
Aerospace Engineering			
Mechanical Engineering			
<b>Nuclear Engineering</b>			
Nuclear Engineering			
Nuclear Nonproliferation Science and Policy			
<b>Operations Research</b>			
Operations Research			
<b>Textile Engineering</b>			
Textile Engineering			

Available online and on campus

Available on campus only

Available online only

BIOMEDICAL ENGINEERING

The Joint UNC / NC State Department of Biomedical Engineering offers a stimulating array of research and training opportunities.

CHEMICAL AND BIOMOLECULAR ENGINEERING

By working alongside leading researchers and educators, our graduate students advance in their field and find solutions to pressing problems.

CIVIL, CONSTRUCTION, AND ENVIRONMENTAL ENGINEERING

The Department of Civil, Construction, and Environmental Engineering offers post-baccalaureate educational programs to satisfy the increasing need for highly educated engineers in various specialty areas of civil, construction, and environmental engineering.

COMPUTER SCIENCE

Graduate programs in computer science provide a variety of excellent education and research opportunities to students from across the U.S. and all over the world.

ELECTRICAL AND COMPUTER ENGINEERING (ECE)

With more than 50 tenured and tenure-track faculty members, our graduate program embraces interdisciplinary collaboration within ECE as well as across the College and University.

EDWARD P. FITTS DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

Industrial and systems engineering is concerned with the design of production systems. The industrial engineer (IE) analyzes and specifies integrated components of people, machines and facilities to create efficient and effective systems that produce goods and services beneficial to mankind. In simple terms, industrial engineers figure out how to do things better.

MATERIALS SCIENCE AND ENGINEERING

The materials science and engineering graduate program focuses on understanding the structure, modification and properties of materials and the development of new or improved processing methods.

MECHANICAL AND AEROSPACE ENGINEERING

The Department of Mechanical and Aerospace Engineering is among the largest and most prominent in the nation. Our strengths include thermal sciences, mechanical sciences, structural dynamics, aerodynamics, aircraft design, hypersonics, propulsion and fluid dynamics.

NUCLEAR ENGINEERING

NC State University’s Department of Nuclear Engineering is the only nuclear engineering program in North Carolina. Our department has a unique history: It is home to the first university-based nuclear reactor and nuclear engineering curriculum in the United States.

BIOLOGICAL AND AGRICULTURAL ENGINEERING (BAE)

BAE graduate programs offer students the opportunity to obtain a world-class graduate education in the fields of environmental engineering, bioprocess engineering, machine systems design and controlled environment engineering.

TEXTILE ENGINEERING

The program is recognized as one of the best programs of its kind across the globe. It is interdisciplinary in nature, drawing upon engineering disciplines, polymer and fiber science and the physical sciences. Research activities include inventory and supply chain control, molecular modeling, nonwovens, thermal protection sciences, comfort design, polymer and fiber science, biomedical applications, wearable electronics, textile composites, filtration and sustainability.

INTEGRATED MANUFACTURING SYSTEMS ENGINEERING (IMSE) INSTITUTE

The IMSE Institute offers a master’s degree in integrated manufacturing systems engineering. An IMSE minor is also available for students enrolled in an M.S. or Ph.D. program in another engineering department. The academic program is multidisciplinary and flexible, permitting students to design a course of study to meet specific interests and needs.

BIOMANUFACTURING

NC State offers novel interdisciplinary graduate degree programs in biomanufacturing. Our students gain hands-on experience using industry-standard equipment along with a comprehensive education in the principles and theory of bioprocessing and biomanufacturing. The program home is the \$50-million Golden LEAF Biomanufacturing Training and Education Center (BTEC). This one-of-a-kind facility features a simulated-cGMP (current Good Manufacturing Practice) pilot plant capable of producing biopharmaceutical products and packaging them in a sterile environment, in addition to laboratories with bench- and intermediate-scale bioprocessing equipment.

OPERATIONS RESEARCH

Operations Research (OR) is the use of scientific methodology to study systems whose design or operation require human input. OR provides the means for making the most effective decisions about systems design and operation. The strength and versatility of OR stems from its diagnostic power through observation and modeling, as well as from its prescriptive power through analysis and synthesis.

ENGINEERING ONLINE

Engineering Online offers you a choice of 16 nationally ranked online graduate programs. These degree programs are the same high-quality engineering and computer science degree programs offered on campus, but with the flexibility of online learning to help you meet your educational and professional goals. Delve in and discover the right program to grow your skill set.

FINANCIAL AID

NC State offers graduate students a broad range of financial assistance options to help with tuition and living expenses.

The College of Engineering also provides funding opportunities for qualified applicants through teaching assistantships, faculty-funded research assistantships and university and college fellowships.

For more information, visit [studentservices.ncsu.edu/your-money](http://studentservices.ncsu.edu/your-money).

HOW TO APPLY

Prospective graduate students anywhere in the world can quickly and easily apply to the College of Engineering via NC State’s Graduate School at [grad.ncsu.edu](http://grad.ncsu.edu).

*What you will need:*

- Transcripts (unofficial copies may be uploaded to the application; official copies will be requested upon admission)
- Three letters of recommendation
- Statement of purpose
- Non-refundable \$75 application fee (\$85 for international applicants)

NC STATE Engineering

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