# **College of Engineering**

## **Programs**

- Aerospace Engineering (http://catalog.ncsu.edu/graduate/ engineering/aerospace-engineering/)
- Biomanufacturing (http://catalog.ncsu.edu/graduate/engineering/biomanufacturing/)
- Biomedical Engineering (http://catalog.ncsu.edu/graduate/ engineering/biomedical-engineering/)
- Chemical Engineering (http://catalog.ncsu.edu/graduate/engineering/ chemical-engineering/)
- Civil Engineering (http://catalog.ncsu.edu/graduate/engineering/civilengineering/)
- Computer Engineering (http://catalog.ncsu.edu/graduate/engineering/ computer-engineering/)
- Computer Networking (http://catalog.ncsu.edu/graduate/engineering/ computer-networking/)
- Computer Science (http://catalog.ncsu.edu/graduate/engineering/ computer-science/)
- Electric Power System Engineering (http://catalog.ncsu.edu/graduate/ engineering/electric-power-system-engineering/)
- Electrical Engineering (http://catalog.ncsu.edu/graduate/engineering/ electrical-engineering/)
- Engineering (http://catalog.ncsu.edu/graduate/engineering/ engineering/)
- Engineering Education (http://catalog.ncsu.edu/graduate/engineering/ engineering-education/)
- Engineering Management (http://catalog.ncsu.edu/graduate/ engineering/engineering-management/)
- Environmental Engineering (http://catalog.ncsu.edu/graduate/ engineering/environmental-engineering/)
- Industrial Engineering (http://catalog.ncsu.edu/graduate/engineering/ industrial-engineering/)
- Integrated Manufacturing Systems Engineering (http:// catalog.ncsu.edu/graduate/engineering/integrated-manufacturingsystems-engineering/)
- Materials Science & Engineering (http://catalog.ncsu.edu/graduate/engineering/materials-science-engineering/)
- Mechanical Engineering (http://catalog.ncsu.edu/graduate/ engineering/mechanical-engineering/)
- Nanoengineering (http://catalog.ncsu.edu/graduate/engineering/ nanoengineering/)
- Nuclear Engineering (http://catalog.ncsu.edu/graduate/engineering/ nuclear-engineering/)

# **Degree Programs**

### Master's (MR)

- Biomanufacturing (MR) (http://catalog.ncsu.edu/graduate/ engineering/biomanufacturing/biomanufacturing-mr/)
- Chemical Engineering (MR) (http://catalog.ncsu.edu/graduate/ engineering/chemical-engineering/chemical-engineering-mr/)
- Civil Engineering (MR) (http://catalog.ncsu.edu/graduate/engineering/ civil-engineering/civil-engineering-mr/)

- Computer Science (MR) (http://catalog.ncsu.edu/graduate/ engineering/computer-science/computer-science-mr/)
- Engineering (MR) (http://catalog.ncsu.edu/graduate/engineering/engineering/engineering-mr/)
- Engineering (MR): Aerospace Engineering Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering/engineering-mraerospace-engineering-concentration/)
- Engineering (MR): Chemical Engineering Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering/engineering-mr-chemical-engineering-concentration/)
- Engineering (MR): Computer Engineering Concentration (http:// catalog.ncsu.edu/graduate/engineering/engineering/engineering-mrcomputer-engineering-concentration/)
- Engineering (MR): Computer Science Concentration (http:// catalog.ncsu.edu/graduate/engineering/engineering/engineering-mrcomputer-science-concentration/)
- Engineering (MR): Engineering Management Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering/engineering-mrengineering-management-concentration/)
- Engineering (MR): Industrial Engineering Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering/engineering-mr-industrial-engineering-concentration/)
- Engineering (MR): Materials Science and Engineering Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering/ engineering-mr-materials-science-engineering-concentration/)
- Engineering (MR): Mechanical Engineering Concentration (http:// catalog.ncsu.edu/graduate/engineering/engineering/engineering-mrmechanical-engineering-concentration/)
- Engineering (MR): Nuclear Engineering Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering/engineering-mrnuclear-engineering-concentration/)
- Engineering Management (MR) (http://catalog.ncsu.edu/graduate/ engineering/engineering-management/engineering-management-mr/)
- Engineering Management (MR): Advanced Manufacturing Concentration (http://catalog.ncsu.edu/graduate/engineering/ engineering-management/engineering-management-mr-advancedmanufacturing-concentration/)
- Engineering Management (MR): Analytics Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering-management/engineering-management-mr-analytics-concentration/)
- Engineering Management (MR): Entrepreneurship Concentration (http://catalog.ncsu.edu/graduate/engineering/engineeringmanagement/engineering-management-mr-entrepreneurshipconcentration/)
- Engineering Management (MR): Facilities Engineering Concentration (http://catalog.ncsu.edu/graduate/engineering/engineeringmanagement/engineering-management-mr-facilities-engineeringconcentration/)
- Engineering Management (MR): General Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering-management/engineering-management-mr-general-concentration/)
- Engineering Management (MR): Health and Human Systems Concentration (http://catalog.ncsu.edu/graduate/engineering/ engineering-management/engineering-management-mr-healthhuman-sys-concentration/)
- Engineering Management (MR): Professional Practice Concentration (http://catalog.ncsu.edu/graduate/engineering/engineering-

- management/engineering-management-mr-professional-practice-concentration/)
- Engineering Management (MR): Supply Chain Engineering & Management Concentration (http://catalog.ncsu.edu/graduate/ engineering/engineering-management/engineering-management-mrsupply-chain-concentration/)
- Environmental Engineering (MR) (http://catalog.ncsu.edu/graduate/ engineering/environmental-engineering/environmental-engineeringmr/)
- Industrial Engineering (MR) (http://catalog.ncsu.edu/graduate/ engineering/industrial-engineering/industrial-engineering-mr/)
- Integrated Manufacturing Systems Engineering (MR) (http:// catalog.ncsu.edu/graduate/engineering/integrated-manufacturingsystems-engineering/integrated-manufacturing-systems-engineeringmr/)
- Materials Science and Engineering (MR) (http://catalog.ncsu.edu/ graduate/engineering/materials-science-engineering/materialsscience-engineering-mr/)
- 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-sciencesconcentration/)
- Nanoengineering (MR): Materials Science in Nanoengineering Concentration (http://catalog.ncsu.edu/graduate/engineering/ nanoengineering/nanoengineering-mr-materials-scienceconcentration/)
- Nanoengineering (MR): Nanoelectronics and Nanophotonics Concentration (http://catalog.ncsu.edu/graduate/engineering/nanoengineering/nanoengineering-mr-nanoelectronics-nanophotonics-concentration/)
- Nuclear Engineering (MR) (http://catalog.ncsu.edu/graduate/ engineering/nuclear-engineering/nuclear-engineering-mr/)

#### Master of Science (MS)

- Aerospace Engineering (MS) (http://catalog.ncsu.edu/graduate/ engineering/aerospace-engineering/aerospace-engineering-ms/)
- Biomanufacturing (MS) (http://catalog.ncsu.edu/graduate/ engineering/biomanufacturing/biomanufacturing-ms/)
- Biomedical Engineering (MS) (http://catalog.ncsu.edu/graduate/ engineering/biomedical-engineering/biomedical-engineering-ms/)
- Biomedical Engineering (MS): MedTech Innovation and Entrepreneurship Concentration (http://catalog.ncsu.edu/graduate/engineering/biomedical-engineering/biomedical-engineering-mstranslation-innovation-entrepreneurship-concentration/)
- Biomedical Engineering (MS): Traditional Concentration (http://catalog.ncsu.edu/graduate/engineering/biomedical-engineering/biomedical-engineering-ms-traditional-concentration/)
- Chemical Engineering (MS) (http://catalog.ncsu.edu/graduate/engineering/chemical-engineering/chemical-engineering-ms/)
- Civil Engineering (MS) (http://catalog.ncsu.edu/graduate/engineering/ civil-engineering/civil-engineering-ms/)
- Computer Engineering (MS) (http://catalog.ncsu.edu/graduate/ engineering/computer-engineering/computer-engineering-ms/)
- Computer Engineering (MS): Internship Concentration (http://catalog.ncsu.edu/graduate/engineering/computer-engineering/computer-engineering-ms-internship-concentration/)

- Computer Networking (MS) (http://catalog.ncsu.edu/graduate/ engineering/computer-networking/computer-networking-ms/)
- Computer Networking (MS): Internship Concentration (http://catalog.ncsu.edu/graduate/engineering/computer-networking/computer-networking-ms-internship-concentration/)
- Computer Science (MS) (http://catalog.ncsu.edu/graduate/ engineering/computer-science/computer-science-ms/)
- Electric Power System Engineering (MS) (http://catalog.ncsu.edu/ graduate/engineering/electric-power-system-engineering/electricpower-systems-engineering-ms/)
- Electric Power System Engineering (MS): Internship Concentration (http://catalog.ncsu.edu/graduate/engineering/electric-power-system-engineering/electric-power-systems-engineering-ms-internship-concentration/)
- Electric Power System Engineering (MS): Wide Bandgap Power Electronics Concentration (http://catalog.ncsu.edu/graduate/ engineering/electric-power-system-engineering/electric-powersystems-engineering-ms-wide-bandgap-power-electronicsconcentration/)
- Electrical Engineering (MS) (http://catalog.ncsu.edu/graduate/ engineering/electrical-engineering/electrical-engineering-ms/)
- Electrical Engineering (MS): Internship Concentration (http://catalog.ncsu.edu/graduate/engineering/electrical-engineering/electrical-engineering-ms-internship-concentration/)
- Engineering Education (MS) (http://catalog.ncsu.edu/graduate/ engineering/engineering-education/engineering-education-ms/)
- Engineering Education (MS) (http://catalog.ncsu.edu/graduate/ engineering/engineering-education/engineering-education-ms/)
- Environmental Engineering (MS) (http://catalog.ncsu.edu/graduate/ engineering/environmental-engineering/environmental-engineeringms/)
- Industrial Engineering (MS) (http://catalog.ncsu.edu/graduate/ engineering/industrial-engineering/industrial-engineering-ms/)
- Materials Science and Engineering (MS) (http://catalog.ncsu.edu/ graduate/engineering/materials-science-engineering/materialsscience-engineering-ms/)
- Mechanical Engineering (MS) (http://catalog.ncsu.edu/graduate/ engineering/mechanical-engineering/mechanical-engineering-ms/)
- Nuclear Engineering (MS) (http://catalog.ncsu.edu/graduate/ engineering/nuclear-engineering/nuclear-engineering-ms/)

# **Doctor of Philosophy (PhD)**

- Aerospace Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/aerospace-engineering/aerospace-engineering-phd/)
- Biomedical Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/biomedical-engineering/biomedical-engineering-phd/)
- Chemical Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/chemical-engineering/chemical-engineering-phd/)
- Civil Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/civil-engineering/civil-engineering-phd/)
- Computer Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/computer-engineering/computer-engineering-phd/)
- Computer Science (PhD) (http://catalog.ncsu.edu/graduate/ engineering/computer-science/computer-science-phd/)
- Electrical Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/electrical-engineering/electrical-engineering-phd/)

- Industrial Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/industrial-engineering/industrial-engineering-phd/)
- Materials Science and Engineering (PhD) (http://catalog.ncsu.edu/ graduate/engineering/materials-science-engineering/materialsscience-engineering-phd/)
- Mechanical Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/mechanical-engineering/mechanical-engineering-phd/)
- Nuclear Engineering (PhD) (http://catalog.ncsu.edu/graduate/ engineering/nuclear-engineering/nuclear-engineering-phd/)

#### **Minors**

- Aerospace Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/aerospace-engineering/aerospace-engineering-minor/)
- Biomanufacturing (Minor) (http://catalog.ncsu.edu/graduate/ engineering/biomanufacturing/biomanufacturing-minor/)
- Biomedical Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/biomedical-engineering/biomedical-engineering-minor/)
- Chemical Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/chemical-engineering/chemical-engineering-minor/)
- Civil Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/civil-engineering/civil-engineering-minor/)
- Computer Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/computer-engineering/computer-engineering-minor/)
- Electrical Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/electrical-engineering/electrical-engineering-minor/)
- Industrial Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/industrial-engineering/industrial-engineering-minor/)
- Materials Science and Engineering (Minor) (http://catalog.ncsu.edu/ graduate/engineering/materials-science-engineering/materialsscience-engineering-minor/)
- Mechanical Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/mechanical-engineering/mechanical-engineering-minor/)
- Nuclear Engineering (Minor) (http://catalog.ncsu.edu/graduate/ engineering/nuclear-engineering/nuclear-engineering-minor/)

#### **Certificates**

- 5G Technology (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/electrical-engineering/5g-technologies-certificate/)
- ASIC Design & Verification (Certificate) (http://catalog.ncsu.edu/ graduate/engineering/electrical-engineering/asic-design-andverification-certificate/)
- Biomanufacturing (MR): Industry Track (http://catalog.ncsu.edu/ graduate/engineering/biomanufacturing/biomanufacturing-mr/ industry-track/)
- Biomanufacturing Online Graduate Certificate (http:// catalog.ncsu.edu/graduate/engineering/biomanufacturing/ biomanufacturing-online-graduate-certificate/)
- Biomedical Engineering (MS): MedTech Innovation and Entrepreneurship Concentration (http://catalog.ncsu.edu/graduate/ engineering/biomedical-engineering/biomedical-engineering-mstranslation-innovation-entrepreneurship-concentration/)
- Computer Engineering (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/computer-engineering/computer-engineering-certificate/)
- Computer Science (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/computer-science/computer-science-certificate/)

- Cybersecurity (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/graduate-certificate/cybersecurity-certificate/)
- Data Science Foundations (Certificate) (http://catalog.ncsu.edu/ graduate/engineering/computer-science/data-science-foundationscertificate/)
- Downstream Biomanufacturing (Certificate) (http://catalog.ncsu.edu/ graduate/engineering/biomanufacturing/downstreambiomanufacturing-certificate/)
- Electrical Engineering (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/electrical-engineering/electrical-engineering-certificate/)
- Engineering Education (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/engineering-education/engineering-education-certificate/)
- Engineering Management Analytics (Certificate) (http:// catalog.ncsu.edu/graduate/engineering/engineering-management/ eng-mgmt-analytics-cert/)
- Engineering Management Foundations (Certificate) (http://catalog.ncsu.edu/graduate/engineering/engineering-management/eng-mgmt-found-cert/)
- Health Physics (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/graduate-certificate/health-physics-certificate/)
- Materials Informatics (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/materials-science-engineering/materials-informaticscert/)
- Materials Science and Engineering (Certificate) (http://catalog.ncsu.edu/graduate/engineering/materials-science-engineering/materials-science-engineering-certificate/)
- Nano-Systems Engineering (Certificate) (http://catalog.ncsu.edu/ graduate/engineering/electrical-engineering/nano-systemsengineering-certificate/)
- Nanobiotechnology (Certificate) (http://catalog.ncsu.edu/graduate/ engineering/biomedical-engineering/nanobiotechnology-certificate/)
- Performance Based Earthquake Engineering (Certificate) (http://catalog.ncsu.edu/graduate/engineering/civil-engineering/performance-based-earthquake-engineering-cert/)
- Renewable Electric Energy Systems (Certificate) (http:// catalog.ncsu.edu/graduate/engineering/electrical-engineering/ renewable-electric-energy-systems-certificate/)
- Upstream Biomanufacturing (Certificate) (http://catalog.ncsu.edu/ graduate/engineering/biomanufacturing/upstream-biomanufacturingcertificate/)