

MASTER OF SCIENCE & DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING

Program Overview

A graduate degree in Mechanical Engineering prepares students for employment as faculty members in universities and researchers in public and private sector. Past graduates have been placed in a variety of high-tech positions across the globe.

The objective of graduate programs in Mechanical Engineering is to provide advanced level study in distinct areas of specialization. The Master of Science in Mechanical Engineering prepares the graduate student for Doctoral level studies or for advanced mechanical engineering practice in industry, consulting or government service. Graduate Degree programs in Mechanical Engineering are Master of Science (MS), and Doctor of Philosophy (PhD).

For More Information

Please Contact: Graduate Program Coordinator Dr. John Kizito jpkizito@ncat.edu

Areas of Concentration

- Materials and manufacturing Systems
- Energy Systems
- Thermal/fluid systems
- Design Mechanics & Control Systems
- Aerospace Systems

Research Areas

- Computational Fluid Dynamics, Hypersonic, Plasma-based flow controls
- Mechanics of advanced composite materials and structure
 Structural Hoalth Monitoring
- Structural Health Monitoring
- Thermosciences, Tissue Engineering, Cryopreservation
- Energy Conversion
- Engineering Mechanics: Fatigue and Fracture Mechanics
- Aerospace Propulsion Systems, Waveriders, Numerical Methods, Expert Systems & Objected Oriented Programming.
- Fluid Dynamics, Thermal Management, Astronautics, Microgravity
- Condensed Matters, Nanomaterials
- Advanced and Multifunctional Materials, Structure-Property Relationships, Innovation in Process Technologies.
- Engineering Solid Mechanics and Polymer Composite
- Materials & Structures
- Engineering Science and Mechanics
- Materials including; Powder Metallurgy, Metal Additive Manufacturing Characterization
- System Dynamics and Control

Research Laboratories and Centers

- NSF Engineering Research Center for Revolutionizing Metallic Biomaterials
- NASA Center for Aviation Safety
- Center for Composite Materials Research
 Center for Advanced Materials and Smart
- Structures
- Several state-of-the-art research laboratories

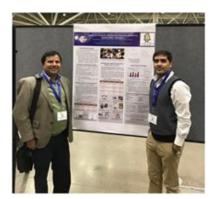


Graduate Placement

Graduates of the program find employment as University faculty, researchers in NASA, DoD, and DOE research laboratories, as well as aerospace, automotive, manufacturing, and many service industries

Funding

Faculty in Mechanical Engineering and several graduate research assistants work under research projects funded by *NSF, NASA, AFRL, Navy, and Army.* In addition, several students are supported by the Mechanical Engineering department as teaching assistants. A limited number of fellowships are also available. Financial aid is based on merit and availability of funds.



North Carolina Agricultural and Technical State University THE GRADUATE COLLEGE grad@ncat.edu • 336-285-2366 https://graduateadmissions.ncat.edu

NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY THE GRADUATE COLLEGE

OUR RESEARCH STRENGTHS

- Aerospace and Transportation Systems
- Biomedical Research
- Biotechnology & Biosciences
- Computer and Computational Sciences
- Defense and National Security
- Energy and the Environment
- Food Science
- Human Health, Nutrition and Wellness
- Leadership and Community Development
- Nanotechnology and Multi-Scale
- Social and Behavioral Sciences
- Transportation and Logistics

AGGIE POINTS OF PRIDE

- Ranked by the Carnegie Classification of Institutions of Higher Education as "doctoral/research university"
- Ranked third within the UNC System in research funding, with over \$56 million in sponsored programs and nearly \$7 million in appropriations for agricultural research and cooperative extension
- Received the National Science Foundation's prestigious Engineering Research Center (ERC) grant for biomedical engineering and nanobio applications research totaling more than \$18 million over five years
- Received a National Science Foundation's Math S-STEM Program in Mathematics grant
- The National Council on Teacher Quality (NCTQ) preparation programs among the top in the state
- North Carolina A&T graduates students in STEM disciplines at nearly twice the rate of the UNC system average
- The Triangle Business Journal has reported that North Carolina A&T State University ranks No. 1 among historically black colleges and universities in North Carolina and No. 4 in the UNC System for the highest return on investment of colleges and universities

CONTACT INFO

THE GRADUATE COLLEGE GRAD@NCAT.EDU **336-285-2366**



OFFICE OF STUDENT FINANCIAL AID FINAID@NCAT.EDU (336) 334-7973



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ADMISSIONS REQUIREMENTS and DEADLINES

ADMISSION REQUIREMENTS

- Online application
- Application fee
- Transcripts
- Personal statement
- Recommendation letters
- * Some programs require standardized test scores and/or on campus interviews

IMPORTANT APPLICATION DEADLINES

	Priority	US Citizen	International
Fall	February 1	July 1	June 1
Spring	September 1	November 1	October 1
Summer	NA	April 1	NA

Earlier deadlines for certain programs apply. Check www.ncat.edu/tgc and click Graduate Admissions–Admission Application Requirements and Instructions.

FINANCING GRADUATE STUDIES

For detailed information on tuition, fees, and related costs of education, assistantships, fellowships, and other financial assistance visit www.ncat. edu/tgc and click Financial Information.