

MASTER OF SCIENCE & DOCTOR OF PHILOSOPHY IN COMPUTATIONAL SCIENCE AND ENGINEERING

Program Overview

The M.S. and Ph.D. in Computational Science and Engineering prepares students for interdisciplinary computationallyoriented research and technical careers in industry, government, and academia. The programs emphasize the application and development of computational modeling and analysis in engineering, the sciences, technology, business and computing.

The Department invites all students with a B.S. or M.S. degree from the Science, Technology, Engineering, and Mathematics disciplines to apply to its programs.

For More Information

Please Contact:

Department Chair, Dr. Marwan Bikdash bikdash@ncat.edu, 336-285-3249

Graduate Program Coordinator, Dr. Dukka Kc dbkc@ncat.edu, 336-285-3210

Program Structure

- The M.S. Program in Computational Science and Engineering requires 30 credits after the B.S. and offers three options: a) Course-only, which can be completed in one year; b) Project option; and c) Thesis option. Also offered is a concentration in Systems Engineering.
- The Ph.D. Program in Computational Science and Engineering requires 44 credits beyond the M.S., or 62 credits beyond the B.S.

Research Areas

- Data sciences and analytics
- Computational modeling and simulation in physical and engineering sciences
- Enabling technologies for visualization and high-performance computing
- Computational modeling and simulation in nonphysical disciplines such as bioinformatics, econometrics, and logistics

Research Laboratories and Centers

- Research High Performance Computing Laboratory
- Scientific Visualization Laboratory



Graduate Placement

Graduates of the programs find employment with government agencies, federal laboratories, large multinational firms, and universities such as:

Intel Corporation, Proctor and Gamble Qualcomm, Security Exchange Commission (SEC), Booze-Allen Hamilton, HP

Funding

Core and affiliated faculty in CSE have several research projects funded by government and industry, including

Department of Defense National Science Foundation National Institute of Health **Departments of Transportation** NASA and JPL **Department of Energy**

In addition to tuition remission, students may receive teaching and research assistantships. A limited number of University and Graduate College fellowships for eligible students are also available. Financial aid is based on merit, need, and the availability of funds.



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

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.



CONTACT INFO

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