# COLLEGE OF SCIENCE AND TECHNOLOGY





# Graduate Handbook

Master of Science in Information
Technology (MSIT)

North Carolina A&T State University
Price Hall 203
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Greensboro, North Carolina 27411
(336) 334-7717
Last Updated: July 2023



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# Part I. Chair's Welcome

# Welcome

It is an honor to welcome you to the College of Science and Technology at North Carolina Agricultural and Technical State University. Our mission is to provide an academically challenging, value-based environment that prepares learners to be critical thinkers, global citizens, effective communicators, and responsible leaders.

We find ourselves in exciting times as there are numerous opportunities for students receiving advanced degrees in Science, Technology, Engineering, and Math (STEM) disciplines. As you pursue an advanced degree in the College of Science and Technology, you will embark on an intriguing journey that will enable you to acquire skills, knowledge, insights and professional experiences required to compete in a rapidly changing workforce environment that supports the new global business enterprise.

Our Master of Science in Information Technology (MSIT) is nationally ranked, and our alumni are in high demand. The field of Information Technology is today's fastest-growing profession. As information technology continues to advance rapidly, job offers in computing professions remain high. Our Information Technology program will give you an in-depth understanding of computer networking, database management, data mining, high-performance computing, low-power design, and wireless communication.

As graduate students, you are the most valuable members of our team. We hope that prospective students will find our program attractive and consider joining us here at North Carolina A&T State University College of Science and Technology for a uniquely fulfilling graduate education. No matter whether your dream is to be a Project Manager, Network Engineer, or any type of Information Technology professional in a major corporation or government agency, our school is for you.

To apply, please contact the graduate office.

Evelyn Sowells-Boons

Sincerely,

Evelyn Sowells-Boone., Ph.D.

Chair, Computer Systems Technology Department

College of Science and Technology

# Part II. The College of Science and Technology

# Introduction

In a rapidly evolving technology industry, businesses, schools, and governments need workers with diverse skill sets, a broad capacity for problem solving, and a team-oriented perspective. The College of Science and Technology educates the whole person so you can compete in the 21st century workplace.

We take individuals, proficient in the application of basic science and math and prepare them for employment by nurturing their creativity, training them in management and communication, and providing them with the advanced knowledge they need for technical, leadership, and educational roles. Students enjoy, in many cases, over 90% placement and demand competitive salaries.

You can take your first step to a rewarding career with one of our undergraduate programs: Bachelor of Science degree in Applied Engineering Technology, Bachelor of Science degree in Construction Management, Bachelor of Science degree in Electronics Technology, Bachelor of Science degree in Information Technology, Environmental Health and Safety, Geomatics, Graphic Communication Systems, and Motorsports Technology. Our graduate programs will take you to the next level of expertise: Information Technology, Technology Management, and Technology Education.

Come and pursue technology jobs of tomorrow with an North Carolina Agricultural and Technical State University (NC A&T) education today Apply to NC A&T or contact an admissions counselor to start your high-tech career.

# Vision

The College of Science and Technology at North Carolina Agricultural and Technical State University aspires to be a premier College of Science and Technology in solving global challenges.

# Mission

The mission of the College of Science and Technology at North Carolina Agricultural and Technical State University is to develop science and technology leaders for the global economy. We will accomplish our mission through:

- Creative use of science, technology and innovation in our instruction,
- Strategic private and public partnerships in research and scholarship, and
- A student centered and project-based learning environment.

# **Core Values**

In the pursuit of excellence, we value.

- Social Responsibility
- Professionalism
- Learning
- Innovation
- Civility
- Ethical Based Leadership

# **Important Websites**

# Department of Computer Systems Technology (CST) Website:

https://www.ncat.edu/cost/departments/computer-systems-technology/index.php

# **Graduate College Website:**

https://www.ncat.edu/tgc/index.php

# **Graduate College Website: New Student Information**

https://www.ncat.edu/tgc/new-students/index.php

### **Tuition and Fees:**

https://hub.ncat.edu/administration/business-and-finance/comptroller/treasurers-office/tuition-and-fees.php

### **Admissions Link:**

https://www.ncat.edu/tgc/graduate-admissions-application-instructions.php

# **Academic Calendar:**

https://www.ncat.edu/registrar/academic-calendar-pdfs/index.php

# Other Important Information (forms, deadlines etc.):

https://www.ncat.edu/tgc/continuing-students/index.php

# **List of Important Graduate College Forms:**

Important forms can be downloaded from Graduate College website or select the links below:

https://hub.ncat.edu/policies/graduate/graduate-college-forms.php

# **General Academic Forms:**

- 1) Plan of Study
- 2) Degree Clearance
- 3) Application for Add-on Certificate in Counseling
- 4) Application for a Double Major
- 5) Application for Re-enrollment Application
- 6) Change of Name Form
- 7) Change of Program Form
- 8) Leave of Absence Request
- 9) Non-Course / Exam Degree Requirements
- 10) Request for Transfer of External Credits

### **Graduate Assistantship Forms:**

- 1) Graduate Assistant Contract
- 2) Graduate Assistant Evaluation

# **Thesis/Dissertation Forms:**

## Committee Forms:

- 1) Report of Thesis Committee Composition
- 2) Report of Dissertation Committee Composition
- 3) List of Graduate Faculty (requires OneID login)
- 4) Request to Change Thesis/Dissertation Committee

### **Defense Forms:**

- 1) Request to Schedule Thesis/Dissertation Defense
- 2) Request to Conduct Remote Thesis/Dissertation Defense
- 3) Oral Defense Results

# Part III. Master of Science in Information Technology Program

# Master of Science degree in Information Technology (MSIT)

The MSIT degree program prepares students to pursue technical, as well as management careers in all employment sectors. The program emphasizes acquisition of sound theoretical concepts with intensive "hands-on" experience in the area of information technology. The courses are taught by faculty with high level expertise gained through their research activity, affiliations with industry and professional experience.

Major: 1). On-Campus: Information Technology – INFO

2). Distance Learning: Information Technology - INFO-O

# **Program Overview**

The Master of Science in Information Technology (MSIT) prepares students to pursue technical, as well as management careers in all employment sectors. The program emphasizes acquisition of sound theoretical concepts with intensive "hands-on" experience in the area of information technology. The courses are taught by faculty with high-level expertise gained through their research activity, affiliations with industry, and professional experience.

# **Program Admission Requirements**

An applicant may be given unconditional admission to the MSIT Program if he/she possesses a Bachelor's degree in a related field from an accredited institution with an overall GPA of 3.0 or better on a 4.0 scale. If an applicant does not meet the above stated admission requirements, he/she may be admitted conditionally.

# **Admissions Deadlines**

Please check the following link::

https://www.ncat.edu/admissions/graduate/admission-requirements.php

# How to Apply

Please apply by clicking on the following link:

https://www.ncat.edu/admissions/graduate/admission-requirements.php

# **Class Registration & Payments**

Please see the university's academic calendar at the following link:

https://www.ncat.edu/registrar/academic-calendar-pdfs/index.php

**International Applicants:** In order to be eligible for admission to the Graduate College all international applicants, regardless of citizenship, must demonstrate proficiency in English at a level necessary to be successful in a graduate program at North Carolina A&T State University. This requirement can be met for most applicants in one of the following ways:

- Provide **Test of English as a Foreign Language (TOEFL)** with a total score of **at least 79** on the Internet-based Test (iBT).
- Provide International English Language Testing System (IELTS) scores with an overall band score of at least 6.5 or PTE Academic Score of 53 or higher.
- Successful completion of **INTERLINK**, the intensive English language program located on the campus of the University of North Carolina at Greensboro
- Concurrent Interlink enrollment: Starting in Fall 2013, applicants with TOEFL iBT scores in the range 40 78, or IELTS scores in the range 5.0 6.49, or PTE scores in the range 36 52 may enroll in the Interlink intensive English

language training course concurrently with enrollment in six credit hours of graduate courses in a degree. Interlink classes cannot be deferred. If you are required to enroll in Interlink, you must begin English-language classes in your first semester and continue each semester until all Interlink course work is completed. The Interlink English-language study will increase the overall cost of your degree program, because courses at Interlink are billed at Interlink tuition rates.

• Hold a degree from an accredited four-year US college or university.

# For additional admission requirements, please visit the Graduate College Website:

https://www.ncat.edu/admissions/graduate/admission-requirements.php

# Program Curriculum Guide

The Master of Science in Information Technology offers two options: the thesis option and the course work option. The thesis option requires a minimum of 30 semester hours. The course work option requires a minimum of 30 semester hours. In addition, students must maintain and complete the Master of Science in Information Technology program with an overall GPA of 3.0 or better on a scale of 4.0. Up to twelve semester hours of graduate work may be transferred from another university, provided it was not a part of any prior undergraduate degree requirement. The course content must adequately replace current graduate offerings in the student's curriculum. Transfer credits should be at a level comparable to 600 or 700 level courses at North Carolina A&T State University.

Program	Option	Foundation Courses	Technical Electives Course	Thesis Courses	Total Credits
Information Technology	Thesis	9 credits	15 credits	6 credits	30 credits
Information Technology	Coursework	9 credits	21 credits		30 credits

Course Schedule*						
Course #	e # Foundation Courses		Spring	Summer I	Summer II	
CST 700	Project Management for Information Technology Professional	Х		Х		
CST 702	Statistical Methods for Information Technology	Х	Х		Х	
CST 703	Technical Research Writing & Communication Skills for Information Technology	Х	х	Х		
	Elective Courses					
CST 605	Principles of Computer Networking	Х		Х		
CST 610	Digital Communications	Х			Х	
CST 615	Networking Security Applications		Х	Х		
CST 620	Telecommunications Management	Х			Х	
CST 625	Computer Database Management	Х				
CST 650	Wireless Communication Systems			Х		
CST 685	Special Topics in IT	Х	Х	Х		
CST 690	Ethical issues in Information Technology				Х	
CST 729	Data Warehousing		Х			
CST 731	Knowledge Discovery in Databases		Х			
CST 750	Computer System Security		Х		Х	
CST 764	Advanced Big Data Analytics		Х			
CST 797	Master's Thesis	Х	Х	Х	Х	

<sup>\*</sup> The abobe course offering schedule may vary.

# **Course Descriptions**

All courses that are offered by the Graduate Program in the College of Science and Technology can be found in the university's Course Catalog, searchable by term. You can access a description of each course by using the following steps or link.

# **Navigation Steps:**

NCAT.edu >> Current Students >> Aggie Access Online >> Course Catalog >> Select the Term >> Select Subject (Computer Systems Technology) >> Select Level (Graduate)

### Link:

https://ssbprod-ncat.uncecs.edu/pls/NCATPROD/bwckctlg.p disp dyn ctlg

# Information for Current Students:

https://www.ncat.edu/current-students/index.php

# **Faculty Research Areas**

You can find each faculty member's research interests by the link:

https://www.ncat.edu/cost/departments/computer-systems-technology/faculty-and-staff/index.php

# Part IV. Graduate Academic Policies and Procedures

# NC A&T Graduate College Catalog

All guidelines and procedures concerning Graduate College can be found in the NC A&T State University Graduate Catalog located at the following link: https://www.ncat.edu/tgc/graduate-catalog/index.php. The student handbook is available on https://www.ncat.edu/campus-life/student-affairs/departments/dean-of-students/student-handbook.php

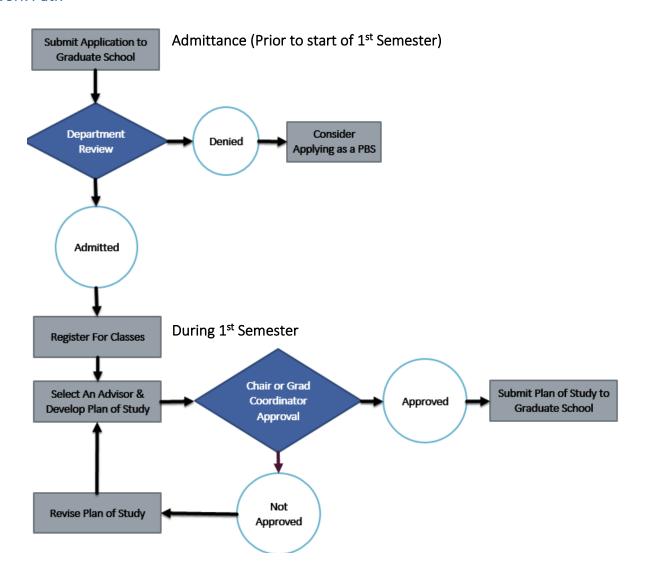
# **Email Accounts**

All College of Science and Technology students should check their NC A&T State University email accounts multiple times a day. This is a vital tool of communication between the University, the Department, the faculty, and with your classmates.

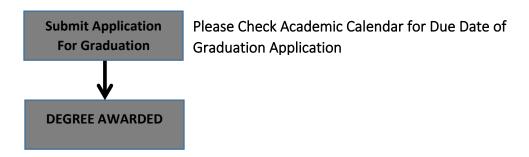
# **Graduate College Staff**

https://www.ncat.edu/tgc/contact.php

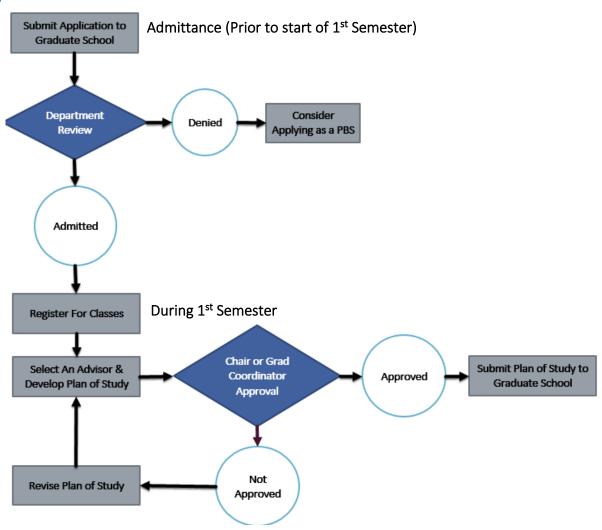
# **MSIT Coursework Path**

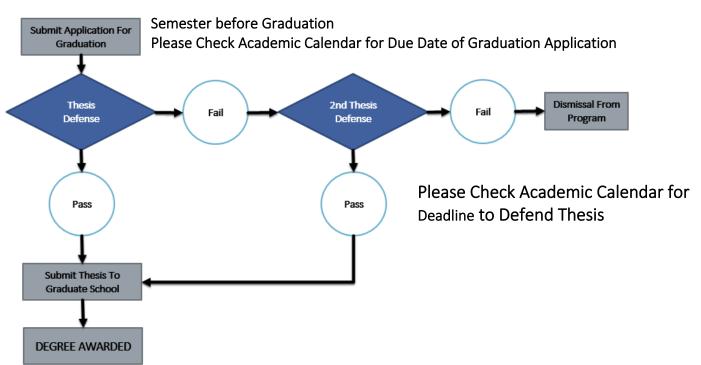


# Semester before Graduation



# **MSIT Thesis Path**





# **Applying for Graduation**

Please Note: The approved University fee structure requires a non-refundable payment of \$60 Graduation Fee and a \$20 late fee for a total of \$80 (Note: The fees may vary. Please verify with the Graduate College.). The University cannot ensure that the names of late filing applicants will appear in the Commencement Program. This is a two-step process. The fee is assessed for students once step 1 is completed. Please refer to the university calendar for the application submission deadlines.

# University Academic Calendar:

www.ncat.edu > Current Students > Academic Calendar

# Commencement Information

www.ncat.edu > Current Students > Registrar > Commencement

# **Graduate Catalog**

www.ncat.edu > Current Students > Graduate Catalog

# Completing the Online Application

Click the "apply for graduation" link to enter your information on the online application form. Once you submit (register) your application, you will receive an email confirmation of your online application for graduation. Please keep this email for your records. You are NOT required to print the application. The Graduate College will forward your application to your academic department for electronic signatures. If you have any questions, please contact your school/college STAR Associate.

# Eligibility

In order to be eligible for graduation and participate in commencement, you must meet the following requirements. Applications will not be processed if the requirements have not been met:

- Be officially enrolled for the term in which you intend to graduate (The comp exam 788 course will satisfy this requirement)
- Have an earned cumulative GPA 3.0 or above
- Pay required tuition and fees
- Submit your Plan of Graduate Work (Study)
- Submit Transfer of Credit requests (if applicable)
- Submit the Report of Doctoral Dissertation Committee Form (Doctoral Candidates Only)
- Resolve prior semester incomplete grades (this does not apply to IP grades for thesis and dissertation students)
- Students admitted provisionally must now be in unconditional admission status(Consult your academic advisor)
- Successfully complete the thesis/dissertation review process (if applicable).
- The application MUST BE APPROVED by the academic advisor AND chairperson. Your STAR Associate will obtain electronic approval or denial of your application.

# Additional Information

- Your diploma will be mailed to the address provided on the application. If the new address is unknown at the time of application, please email the alternate address to your STAR Associate.
- When you apply for graduation this semester, a \$60.00 graduation fee will be posted to your student account. This fee is non-refundable.
- Students who are awarded a degree during the summer or fall term are eligible to participate in the December commencement ceremony.
- Regalia and other academic paraphernalia is ordered from the University Bookstore. For information on ordering and the next Grad Fest event, contact them by phone at (336) 334-7593.

- If you will not complete degree requirements in the current semester for which you applied, please email the STAR Associate based upon your school/college to request that your graduation application be withdrawn. You must reapply for graduation and enroll in minimum of one credit hour for the semester you expect to graduate.
- Thesis/Dissertation Guidelines:
- https://www.ncat.edu/tgc/continuing-students/thesis/index.php

# What if you do not complete all degree requirements? You must:

- 1. Officially enroll/register for the term in which you intend to graduate (The comp exam 788 course will satisfy this requirement)
- 2. Pay required tuition and fees;
- Submit a new Application for Graduation for the semester in which you expect to graduate to The Graduate
  College by the deadline date specified in the University academic calendar.
   Students who are awarded a degree during the summer or fall term are eligible to participate in the December
  commencement ceremony.

# Apply for Graduation

https://www.ncat.edu/tgc/continuing-students/graduation-information.php

# **Professional Development Resources**

# Self-Guided Modules for Graduate Students

www.ncat.edu > Academics > The Graduate College > Continuing Education > Professional Development Resources

The following modules are self-guided multimedia lessons that address key aspects of the graduate student experience. To get the most out of each module, we recommend following it through from start to finish, but you can also jump directly to a specific section. Each module was developed by a North Carolina A&T State University faculty member—if you have any questions about content or would like more information, please feel free to contact the faculty member directly (information provided within each module). For additional general information or support, please contact the Graduate College, at (336) 285-2372.

- Managing Your Financial Life as a Graduate Student (and Beyond)
- Applying for Scholarships and Fellowships
- Grant Writing Tips and Strategies
- Using SAS and SPSS for Data Analysis

# **Research Ethics**

Part 1 (Introduction to Research Ethics)

Part 2 (Research Misconduct)

Part 3 (Research Planning and Data Management)

# **Graduate Assistantships**

# Applying

As part of its drive to enhance research and graduate education, North Carolina A&T State University has established a number of financial assistance opportunities for outstanding graduate students. These typically take the form of fellowships, research assistantships, teaching assistantships and tuition remission. All awards are highly competitive.

A student may receive at most one of these awards in a given year. Information regarding teaching assistantships can be obtained from the office of the Associate Dean of Graduate Programs and Research. Please complete the College of Science and Technology Assistantship form and return to the college prior to the start of the semesters. revised July 2023

# **Graduate Assistant Training**

Graduate Assistants are a vital part of the fabric of North Carolina A&T State University. The Graduate Assistant Training Program is intended to equip graduate assistants with essential information and skills required to effectively transition from student to paraprofessional. The Training Program also contributes to the training and orientation required of graduate assistants by the Southern Association of Colleges and Universities (SACS) and the University North Carolina System.

# **Frequently Asked Questions**

### How do I become a Graduate Assistant?

Graduate Assistants are chosen by the individual department or office. A Graduate Assistant must be fully admitted to the graduate program devoting full time study toward his or her degree. A Graduate Assistant may not hold non-degree, special or probationary status.

All Graduate Assistants must sign a Graduate Assistant Contract (GAC) as a condition of employment. Graduate Assistants must be evaluated at least once a year. Each department is responsible for completing an evaluation form for its Graduate Assistants. The School of Graduate Studies offers two orientation and training sessions during the academic year to prepare Graduate Assistants for their roles and responsibilities.

# What types of Graduate Assistantships are Available?

There are three types of graduate assistants:

# Graduate Administrative Assistant (GAA)

A Graduate Administrative Assistant's duties primarily involve assisting the University's administrative staff or that of a specific department with collecting, organizing and analyzing various administrative data. A GAA is most often involved in performing computer work, editing, recruiting and working on special projects.

# Graduate Research Assistant (GRA)

A Graduate Research Assistant is one who assumes research oriented responsibilities which involves library work, computer programming, analysis, field work, laboratory experiments, scientific investigations, or other endeavors. GRAs are normally employed by the principal investigator of a funded research project.

# Graduate Teaching Assistant (GTA)

A Graduate Teaching Assistant serves in an instructional role in a class or laboratory within a specific department at North Carolina A&T State University. GTAs may perform pedagogical functions, such as, preparing and grading tests, holding conferences, assigning course grades, or providing support for the faculty member in charge of the course. In all cases, the GTA works under the supervision of a faculty member.

International students applying for teaching assistantships must score a minimum of 550 on the TOEFL paper based test or 213 on the TOEFL computer based test. To qualify for a GA appointment, a student must satisfy the following requirements:

- Pursue a degree at North Carolina A&T State University
- o Register during the academic year for at least 9 credit hours
- o Maintain a 3.0 grade point average and make progress towards the graduate degree
- o Satisfy other requirements of the employment department

# Part V. College of Science and Technology Resources

# **Graduate Assistant Office**

The graduate assistant office, located in Price Hall 201C supports graduate students under teaching and research assistant assignments. The office supports up to 10 students with a working space and computer. Students are able to interact, hold meeting, and conduct research in a quiet, open space.

# Part VI. Directory of Staff & Faculty

# **Department of Computer Systems Technology**

https://www.ncat.edu/cost/departments/computer-systems-technology/faculty-and-staff/index.php

# Frequently Used Phone Numbers

Note: Greensboro, North Carolina's Area Code is (336)

Query	Contact
Bookstore	334-7593
Center for Distance Learning	256-0356
Center for Student Success	334-7855
Counseling	334-7727
Financial Aid	334-7973
Health Center	334-7880
Housing	285-4337
Library	285-4151
Parking Services	285-2027
Police	334-7128
Registrar	334-7595
The Graduate College	285-2366
College of Science and Technology	334-7567
Summer Session	334-7810
Treasurer	334-7721