COLLEGE OF SCIENCE AND TECHNOLOGY

Graduate Handbook

for Master of Science in Information
Technology,
Master of Science in Technology Management,
and
Ph.D. in Technology Management

North Carolina A&T State University
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Part I. Associate Dean'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 opportunies 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.

As graduate students, you are the most valuable members of our team. We hope that prospective students will find our programs attractive and consider joining us here at North Carolina A&T State University College of Science and Technology for a uniquely fulfilling graduate education.

The College of Science and Technology offers two masters programs (the Master of Science in Technology Management and the Master of Science in Information Technology) and one Ph.D. program as a consortium degree program with Indiana State University (Ph.D. in Technology Management). No matter whether your dream is to hold a management position at a company that is a leader in developing new technology or to be an Information Technology professional in a major corporation or government agency, our school is for you.

To apply, please contact the graduate office.

Sincerely,

Clay S. Gloster, Jr., Ph.D.

Professor & Chair Associate Dean of Graduate Programs and Research College of Science and Technology

College of Science and Technology Graduate Programs

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.

Master of Science degee in Technology Management (MSTM)

The MSTM degree program is built upon the competencies achieved at the baccalaureate level in the technology curricula and thus enables students to secure application-oriented technology-management positions in today's industrial environment. This program is designed to prepare technology-management professionals and enhance their proficiencies in several areas. Due to the flexibility of the program, students may build their plan of study around any of the specialized technical disciplines in the School of Technology.

MS in Technology Management – Professional Science Master's concentration in Construction Science and Management

The MSTM program offers a Professional Science Master's (PSM) degree concentration in Construction Science and Management. The PSM program is designed to meet the growing demand for well-trained practitioners in the construction industry. The program equips graduates with strong technical and analytic skills as well as management and professional preparation essential for today's global competitiveness.

Ph.D. in Technology Management

North Carolina A&T State University's College of Science and Technology and Indiana State University offer a joint Doctor of Philosophy consortium degree program in Technology Management. The specializations are: Construction Management, Digital Communications, Human Resource Development and Training, Manufacturing Systems, and Quality Systems.

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, 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 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

Information for All New Graduate Students

Graduate College Website:

http://www.ncat.edu/academics/schools-colleges1/grad/index.html

School of Graduate Studies: New Student Information

http://www.ncat.edu/tgc/new-students/index.html

Graduate Tuition

http://www.ncat.edu/tgc/financial/index.html

Admissions Link:

http://www.ncat.edu/admissions/graduate/index.html

Academic Calendar

http://www.ncat.edu/registrar/academic-calendar/index.html

Other Important Information (forms, deadlines etc.):

http://www.ncat.edu/tgc/continuing/index.html

List of Important Graduate College Forms

Important forms can be downloaded from Graduate College website or select the links below: http://www.ncat.edu/tgc/continuing/forms/index.html

- 1) Change of Name form
- 2) Change of Program form (fillable pdf)
- 3) Transfer of Credit External (fillable pdf)
- 4) Plan of Study (fillable pdf)
- 5) Graduate Assistant Evaluation (fillable pdf)
- 6) Graduate Assistant Contract (fillable pdf)
- 7) Oral Defense form (fillable pdf)
- 8) Report of Dissertation Committee (fillable pdf)

Part III. Master of Science in Information Technology Program

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

Priority Deadlines: Fall Semester – March 1st Spring Semester – September 1st Summer – N/A

How to Apply

Please apply by clicking on the following link: http://www.ncat.edu/admissions/graduate/

Class Registration & Payments

Please see the university's academic calendar at the following link: http://www.ncat.edu/registrar/academic-calendar/index.html

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:

http://www.ncat.edu/admissions/graduate/

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	Management & Technical Course Electives	Thesis Courses	Total Credits
Information Technology	Thesis	9 credits	15 credits	6 credits	30 credits
Information Technology	Coursework	9 credits	21 credits		30 credits

	Year A*				
Course #	Foundation Courses	Fall	Spring	Summer I	Summer II
CST 700	Project Management for Information Technology Professional	Х		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 620	Telecommunications Management	Х			Х
CST 625	Computer Database Management	Х			
CST 690	Ethical issues in Information Technology				Х
CST 605	Principles of Computer Networking	Х			
CST 610	Digital Communications	Х			
CST 615	Networking Security Applications		Х		
CST 650	Wireless Communication Systems			Х	
CST 655	Optical Communication Systems		Х		
CST 731	Knowledge Discovery in Databases		Х		
CST 750	Computer System Security				
CST 755	Enterprise Management Systems		Х		
CST 789	Seminar				
	Thesis Courses				
CST 797	Master's Thesis	Х	Х	Х	Х

	Year B*				
Course #	Foundation Courses	Fall	Spring	Summer I	Summer II
CST 700	Project Management for Information Technology Professional	Х		Х	Х
CST 702	Statistical Methods for Information Technology	Х	Х		Х
CST 703	Technical Research Writing & Communication Skills for Information Technology	Х	Х	X	
	Elective Courses				
CST 620	Telecommunications Management	Х			Х
CST 625	Computer Database Management	Х			
CST 690	Ethical issues in Information Technology				Х
CST 605	Principles of Computer Networking	Х			
CST 610	Digital Communications	Х			
CST 615	Networking Security Applications				
CST 650	Wireless Communication Systems			Х	
CST 655	Optical Communication Systems		Х		
CST 731	Knowledge Discovery in Databases		Х		
CST 750	Computer System Security		Х		
CST 755	Enterprise Management Systems		Х		
CST 789	Seminar				
	Thesis Courses				
CST 797	Master's Thesis	Х	Х	Х	Х

Note: * -- 2016-2017 academic year is Year A, 2017 -2018 academic year is Year B and so on alternately.

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 (Information Telecom Technology) >> Select Level (Graduate)

Link: https://ssbprod-ncat.uncecs.edu/pls/NCATPROD/bwckctlg.p_disp_dyn_ctlg

Research Areas

- o Big Data Analytics
- o Cloud Computing
- o Computer and Network Security
- o Enterprise Computing
- o High Performance Computing
- o Information Retrieval
- o Knowledge Discovery and Data Mining
- o Wireless Networking
- o Telecommunications
- o Renewable Energy

Part IV. Master of Science in Technology Management Program

Major: 1). On-Campus: Technology Management – TEMG

2). Distance Learning: Technology Management – TEMG-O

Program Overview

The College of Science and Technology at North Carolina A&T State University offers a Master of Science in Technology Management (MSTM) degree. This program is housed in the Department of Applied Engineering Technology and is designed to increase students' understanding of industrial management challenges in an array of technical areas and to explore effective methods for dealing with accelerated technological change. The Association of Technology, Management, and Applied Engineering (ATMAE) defines Technology Management as the field concerned with the supervision of personnel across the technical spectrum and a wide variety of complex technological systems. There is an increasing demand for experienced professionals who can play leadership roles involving technology innovation; development and deployment of new technologies across a broad spectrum of industries; planning, problem solving, and decision-making to improve business performance.

Program Admission Requirements

In addition to meeting the University's admission requirements, an applicant may be given unconditional admission to the MSTM Program if he/she possesses a Bachelor's degree from an accredited institution in a related field 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 considered for condition admission.

Admissions Deadlines

Priority Deadlines: Fall Semester – March 1st Spring Semester – September 1st Summer – N/A

How to Apply

Please apply by clicking on the following link: http://www.ncat.edu/admissions/graduate/

Class Registration & Payments

Please see the university's academic calendar at the following link: http://www.ncat.edu/registrar/academic-calendar/index.html

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:

http://www.ncat.edu/admissions/graduate/

Program Curriculum Guide

The Master of Science in Technology Management offers two options: the thesis option and the course work option. In addition students must maintain and complete the Master of Science in Technology Management 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	Management & Technical Course Electives	Thesis Courses	Total Credits
Tachnology Managament	Thesis	9 credits	15 credits	6 credits	30 credits
Technology Management	Coursework	9 credits	21 credits		30 credits

Course #	Foundation Courses	Fall	Spring	Summer I	Summer II
MSTM 701	Strategic Management of Technology and Innovation	Х			
MSTM 703	Statis and Prob in Tech Manage or CST 702 Statistical Methods	Х			
MSTM 704	Research Meth for Tech Manage		Х		
	Mangement Electives				
AET 610	Six Sigma	Х	Х		
AET 613	Supply Chain	Χ			
CM 692	Project Management	Х			
CM 708	Construction Cost Estimating and Project controls	Χ			
CM 764	Risk Management in Construction	Х			
CST 620	Telecommunications Management	Х			Х
CST 625	Computer Database Management	Х			
CST 690	Ethical issues in Information Technology				Х
CST 755	Enterprise Management Systems		Х		
GCS 637	Industrial and Customer Relations		Х		
MSTM 702	Enterprice Resource Planning System (Highly Recommneded)		Х		
TECH 708	Impacts of Technology	Х			
	Technical Electives				
AET 710	Manufacturing Materials				
AET 745	Managing New Prod Devel	Х			
AET 780	Reliability Testing and Analysis		Х		
CM 690	Special Problems in Construction Management		Х		
CM 710	Advanced Construction Practices and Organization		Х		
CM 768	Construction Trends and analysis		Х		

Revised April 2017

CST 605	Principles of Computer Networking	Х			
CST 610	Digital Communications	Х			
CST 615	Networking Security Applications		Х		
CST 650	Wireless Communication Systems			Х	
CST 655	Optical Communication Systems		Х		
CST 731	Knowledge Discovery in Databases		Х		
CST 750	Computer System Security		Х		
GCS 630	Multimedia and Videography				
GCS 632	Graphic Animation	Х			
MSTM 784	Internship				
TECH 717	Special Problems I				
TECH 718	Special Problems II				
	Thesis Course				
MSTM 797	Master's Thesis	Х	X	Х	Х

Master of Science in Technology Management -- Professional Science Master's Concentration in Construction Science and Management

The MSTM program offers a Professional Science Master's (PSM) degree concentration inConstruction Science and Management. The PSM program is designed to meet the growing demand for well-trained practitioners in the construction industry. The program equips graduates with strong technical and analytic skills as well as management and professional preparation essential for today's global competitiveness.

Specific Admission Requirements

In addition to the general MSTM admission requirements, candidates seeking admission to the PSM concentration must possess undergraduare derees in construction-related disciplines, including but not limited to: Architecture, Architectural Engineering, Building Construction, Construction Management, Facilities Management, Civil Engineering, and Geomatics.

Program Curriculum Guide

Foundation Core - Same as MSTM Core

Professional Core (12 Credit Hours)

CM 679 Environmental Issues in Construction Management (3 credits)

CM 708 Construction Cost Estimating & Project Controls (3 credits)

CM 710 Advanced Construction Practices & Organization (3 credits)

LAND 682 Sustainable Development and Construction (3 credits)

Business/Management Electives - Select 6 Credit Hours

CM 692 Project Management (3 credits)

CM 764 Risk Management in Construction

CM 768 Construction Trends and Analysis

MSTM 796 – Master's Degree Project (3) or MSTM 784 – Internship (3)

Total Credit Hours Required: 30.

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 (Information Telecom Technology) >> Select Level (Graduate)

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

MSTM Research Areas

Applied Enginnering Technology
Manufacturing and quality control
Transportation and logistic studies

<u>Construction Science & Management</u>

Construction risk management
Sustainable construction practices
Housing and energy assessment
Construction safety
Sustainable Materials

Environmental Health and Safety

Workplace violence and prevention Noise and auditory control Industrial ergonomics and safety

Graphic Design Technology

Animation & multimedia Website development Game technology Architectural design Package design

Computer Systems Technology

Wireless Networking
Computer and Network Security
Big Data Analytics
Cloud Computing
Enterprise Computing
High Performance Computing
Information Retrieval
Knowledge Discovery and Data Mining
Telecommunications
Renewable Energy

Technology Management and Supervision

Technology assessment, Supply chain management Project management Workplace ethics

Part V. Ph.D. in Technology Management

Program Overview

The Doctor of Philosophy in Technology Management program is designed to prepare students for positions of leadership in the public and private sectors of society. At the conclusion of the program, graduates will have developed skills in research procedures, will have acquired expertise in instructional processes, and will be able to provide service to the industrial and educational community. The program maintains most of the traditional requirements characteristic of advanced graduate study, but is unique in using the resources of a consortium of five universities linked together by alternative communication systems. These member universities have programs staffed by faculty having expertise in many areas of technology. Additionally, laboratories with specialized equipment are available that provide opportunities for research and study. Each university brings to the consortium a unique philosophical quality and extensive library holdings that add depth and quality to the program

The Ph.D. in Technology Management consists of a minimum of 87 credit hours of course work and research beyond the baccalaureate level. Students with appropriate Master's degree coursework can transfer up to 21 credit hours toward the degree. Included in the course work are a general technology core, a research core, a technical specialization, an internship, a residency requirement, and a dissertation. More information about the program can be found at the program website at Indiana State University website:

http://www.indstate.edu/technology/consortphd

Program Curriculum Requirements

Program Area	Distribution System	Institution's	Credit Allocation
Specialization	Digital Classroom, Laboratory, Internet	University with an approved program, plus other contributors	18 semester credits, fee paid to offering university
Professional Studies	Digital Classroom, Laboratory, Internet,Field based	Location of student at time of study or other contributors	9 semester credits, fee paid to offering university
Research Core & Dissertation	Digital Classroom, internet,	Indiana State University(some work at home institution)	27 semester credits, for dissertation credit, fee paid to offering university
General Technology Core	Digital Classroom, Internet	University having expertise	12 semester credits, fee paid to offering university

Program Admission Requirements

Admission to the program is based on students meeting the following standards. The qualitative standards identified below reflect the minimum necessary for admission but do not ensure admittance. Completed application must be mailed to the School of Graduate Studies at Indiana State University. The on-line application process can be found at the following ISU links: https://www.indstate.edu/cgps/graduate

- Bachelor' degree from an accredited university with a minimum undergraduate grade point average of 3.0 on a 4.0 scale.
- Minimum cumulative master's level grade point average of 3.5 on a 4.0 scale.
- Graduate Record Examination minimum scores of 500 on the verbal, quantitative, and analytical general tests.
- Five letters of recommendation.

- Employer validation of 2000 hours of occupational experience related to a technical specialization.
- Written statement including reasons for selecting the program, specialization, and goals upon graduation.

If you have already been admitted and would like to take courses at NC A&T, you must complete our online PBS application. If you need assistance with this process, contact Ms. Angelica Gathings at (336) 285-2379) or agathing@ncat.edu. Admissions Deadlines

How to Apply

Admission and application information can be obtained from the College of Graduate and Professional Studies, Indiana State University. The application form is the College of Graduate and Professional Studies - Application for Admission at Indiana State University.

Use the following link for more information:

http://www.indstate.edu/technology/consortphd

Application materials must include:

- Indiana State University College of Graduate and Professional Studies Application form
- Application fee: Check amount with the Indiana State University College of Graduate and Professional Studies, http://www.indstate.edu/graduate.
- Graduate Record Examination Scores or GMAT sent directly to Indiana State University, College of Graduate and Professional Studies (GRE or GMAT scores must be current taken in the past 5 years of the term of application).
- Original transcripts (both undergraduate and graduate) sent directly to the Indiana State University, College of Graduate and Professional Studies.
- Three years of work experience verified by employer letter.
- Completion of Career Goal Statement. This is a Word document. You may need to download the free Microsoft Word Viewer.
- Five letters of recommendation from persons who are familiar with your ability to do advanced graduate work.
- A current Vita.

Indiana State University's Ph.D. in Technology Management Program admits a limited number of students on a rolling admission basis. Only complete applications are considered up to 30 days prior to the beginning of any given semester. A candidate's application materials are not evaluated until all required application materials are complete and submitted to the College of Graduate and Professional Studies at Indiana State University. Once complete, those materials are evaluated for admission in the next available admission term.

Verification of Occupational Experience

The guidelines for submitting and evaluating materials for occupational experience are:

- The total number of hours worked in the occupation must be a minimum of 6000. These clock hours can be a combination of part-time, summer employment or full-time employment (this cannot be teaching).
- Verification of occupational experience must include the following:
 - o Letters of verification must come from the employer on company letterhead.
 - o Letters must include: job title, description of the duties performed, starting and ending dates of employment, and a statement on the quality of the work.

Admission Guidelines

Admission Review Standards

Admission decision will be based on the combination of all components of the application package.

- o Masters degree in relevant field from an accredited university.
- o Graduate grade index of 3.5 on a 4.0 scale
- o Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) taken within 5 years of application—scores should be competitive, with no minimum score specified.

- o Five letters of recommendation.
- o Completion of Career Goal Statement.
- o Six thousand hours (three years) of validated occupational experience relevant to the field of technology management and/or a technical specialization.
- Affirmative Action
 - o The consortium of universities shall actively seek to recruit and admit students promoting the concepts of diversity and ethnicity in the program.
- Criteria for Evaluating Application

Application materials are reviewed based upon the above mentioned standards; however an applicant with exceptional credentials may be considered for admission if one of the following criteria has not been met:

- o Graduate grade point average is below standard.
- o Verbal Graduate Record Examination score is below standard.
- o Quantitative Graduate Record Examination score is below standard.
- o Graduate grade point average is below standard.
- o Occupational Experience does not meet validation requirement.

Decision Process

Review for admission is made after all required materials have been received at the College of Graduate and Professional Studies at Indiana State University. The PhD Program Coordinating Council reviews application materials on a rolling basis. The Council's admission recommendation is sent to the Program Director who in turn, makes recommendation to the Dean of the College of Graduate and Professional Studies.

Notification concerning the admission decision will be sent from the Dean of the College of Graduate and Professional Studies to the applicant. If a "Denial of admission" is received, reapplication is permitted if additional materials which strengthen the application can be provided..

Student Appeal

Applicants for admission to the PhD in Technology program may appeal the recommendation on admission. The procedure shall include:

- Advising the PhD Program Director in writing that an appeal is being made regarding admission status and submitting both the original application materials plus any additional supporting materials.
- An Appeals Review Committee composed of three members of the PhD Council and two representatives of the Technical Specialization shall be established by the PhD Program Director.
- The recommendation of the Appeals Review Committee shall be forwarded to the Dean of the College of Graduate and Professional Studies for final action.

Program Curriculum Guide

The Program of Study requires study concentrations in one of five areas, completing a minimum of 66 credits of graduate study beyond the Masters, with a majority of this course work at the 600 level or above. The overall program is designed to provide the planned opportunities for increasing both depth and breadth of knowledge in technological studies.

It is essential that graduates of the program have completed the course work required in one (or more) of the Major Areas of Specialization. The Major Area of Specialization should be supported by the Professional Studies Area. This specialized knowledge is enhanced by developing a broader understanding of the interrelations of technology with other disciplines such as science, economics, sociology, and government policy designed into the General Technology Core.

Research is critical to the advancement of knowledge in the profession. Statistical and design procedures can be applied and reinforced by the instructional methodology used in teaching the specialization area. The dissertation is a major piece of research including proposal writing, seeking new information, and concluding with results of the study.

Indiana State University Consortium Contact Information

Indiana State University

College of Technology 101 North Sixth Street Terre Haute, IN 47809 Phone: 812-237-3977

Toll free: 888-478-7003 Fax: 812-237-3733

E-mail: ISU-tchphd@mail.indstate.edu

NCA&T University contact information

Dr. Musibau A. Shofoluwe Professor, Department of Built Environment College of Science & Technology

Phone: (336) 285-3130 Email: musibaus@ncat.edu

Part VI. Graduate Academic Policies & Procedures

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: http://www.ncat.edu/tgc/graduate-catalog/index.html. The student handbook is available on http://www.ncat.edu/student-affairs/student-services/dean/assets/downloads/student-handbook.pdf
Navigation

www.ncat.edu > Academics > The Graduate College > Continuing Students

Indiana State University Graduate Handbook

Link: http://www.indstate.edu/apn/pdf/handbook.pdf

Email Accounts

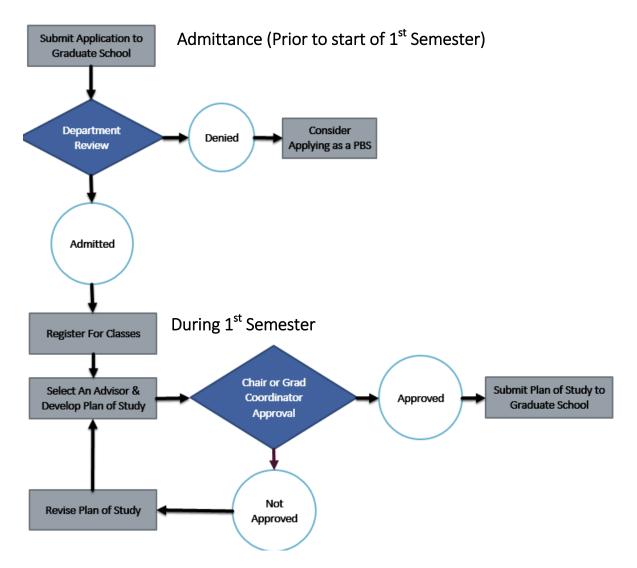
All College of Science and Technology students should check their NC A&T State University email accounts multiple times a day. This is a vital tool of communication between the University, the Department, the faculty, and with your classmates.

Graduate College Council

Advisor, Sharon Hoard – (336) 285-2711 Murphy Hall Room 104

www.ncat.edu > Academics > The Graduate College > Continuing Students > Graduate Student Council

MS (IT & TM) Coursework Path

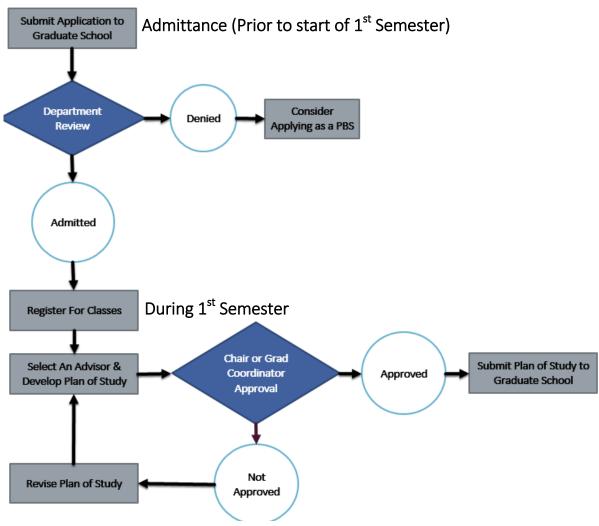


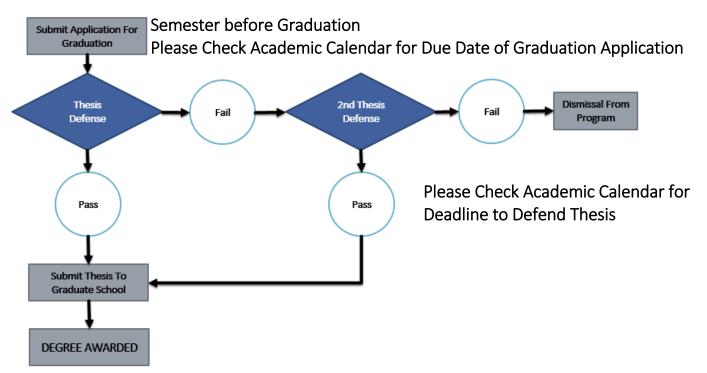
Semester before Graduation



Please Check Academic Calendar for Due Date of Graduation Application

MS (IT & TM) Thesis Path





Graduate Student Forms

- Change of Program
- Leave of Absence
- Transfer of Credit External
- Transfer of Credit A&T Courses
- Plan of Study

http://www.ncat.edu/tgc/continuing/forms/index.html www.ncat.edu > Academics > The Graduate College > Continuing Students > Forms

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. 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 or visit them online at http://ncat.bncollege.com/webapp/wcs/stores/servlet/BNCBHomePage?storeId=74236&catalogId=10001&langId=-1.
- 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 http://www.ncat.edu/tgc/continuing/thesis/index.html

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;
- 3. 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

http://www.ncat.edu/tgc/continuing/graduation.html

Student Transition and Retention (STAR) Team

Joint School of Nanoscience & Engineering and Technology Katrina Boone (kboone@ncat.edu)

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 A. Ayanna Boyd-Williams, Assistant Dean of the Graduate College, at (336) 285-2372 or ayannabw@ncat.edu.

- 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 Teresa Reagan (treagan@ncat.edu) prior to the start of the semesters.

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:

- o 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 VII. 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.

Instructional Electronics Laboratories

Signal Processing Lab (Smith Hall 4008)

Supports the study of electrical and electronics circuits, microcontroller programming, and project management. *Equipment Provided*: 16 Student Computers with NI Circuit Design, Freescale Codewarrior, and Xilinx. 6 Electronics Stations with digital oscilloscopes, power supplies, function generators, and digital meters. This facility also houses solar energy experimentation kits and Dominion Power equipment.

Instructional Computer Laboratories

Instructional Computer Lab (Price Hall 201B)

Supports the study of microcomputer applications, java application development, and C++ programming. Equipment Provided: 20 Student Computers

Large Instructional Computer Lab (Smith Hall 4001)

Supports larger computer lecture courses. Currently Mainframe Computing is offered by our department in this location. Equipment Provided: 30 Thin Clients

Networking Lab (Smith Hall 4016)

Supports the study of computer networking, database management, cisco academy classes, computer forensics, and information technology courses.

Equipment Provided: 20 Student Computers, Cisco Academy routers, catalysts, and modules, computer forensics software, and Apple IPads.

Open Computer Laboratory

Smith Hall 3010

This is an area for students to collaborate and study. It is open from 8 am to 5 pm daily and is equipped with software used in every computer lab in the College of Science and Technology.

Equipment Provided: 25 Student Computers

Part VIII. Directory of Staff & Faculty

Department of Applied Engineering Technology

Dr. Alton L. Kornegay, Assistant Professor

Price Hall 124 / 285-3165 / alkorneg@ncat.edu

B.S., Savannah State University; MBA, University of Iowa; Ph.D., Iowa State University;

Research Interests: Industrial management.

Dr. Mahour Mellat Parast, Assistant Professor

Smith Hall 4018 / 285-3111 / mahour@ncat.edu

B.S., Sharif University of Technology, M.S., University of Science and Technology.

Ph.D., University of Nebraska-Lincoln

Research Interests: Supply-chain management.

Department of Built Environment

Dr. Christian A. Bock-Hyeng, Assistant Professor

Price Hall 113 / 285-3124 / cbhyeng@ncat.edu

B.S., M.S., D. Eng., People's Friendship University, Moscow, Russia.

Research Interests: Thin shells Construction, Strength of Material /Fatigue, Geotechnical Properties (Soil), Accelerated Bridge construction.

Dr. Tony E. Graham, Associate Professor

Smith Hall 3021 / 285-3100 / tgraham@ncat.edu

B.S., North Carolina A&T State University, M.S. and D. Eng., Morgan State University.

Research Interests: Geographical Information System, Building Information Modeling (BIM), Augmented Reality and Visualization.

Dr. Andrea Ofori-Boadu, Assistant Professor

BS Building Technology, University of Science and Technology, MS Industrial Technology, North Carolina A & T State University, PhD Technology Management, Indiana State University, Research Interests: Engineering of Sustainable Supplementary Cement Materials, Management of certified sustainable building projects, Cost Engineering, Informal STEM education for middle school children.

Dr. Robert B. Pyle, Professor and Chair

Price Hall 110 / 285-3121 / pyler@ncat.edu

B.A., M.A., Trenton State College; Ph.D., University of Pittsburgh.

Dr. Musibau A. Shofoluwe, Professor

Price Hall 106 / 285-3130 / musibaus@ncat.edu

B.S., North Carolina A&T State University; M.S., Pittsburgh State University; DIT University of Northern Iowa.

Research Interests: Sustainable Construction Practices, Construction Safety, Construction Risk Management, Construction Productivity Improvement.

Dr. Lewis S. Waller, Assistant Professor

Price Hall 112L / 285-3132 / lw985723@ncat.edu

B.S., M.S., North Carolina A&T State University; Ph.D.; Capella University.

Research Interests: Active learning in Construction, Scheduling, and Construction Employability Skills.

Department of Computer Systems Technology

Dr. Rajeev Agrawal, Associate Professor

Price Hall 209 / 285-3137 / ragrawal@ncat.edu

B.S., Computer Science, G.B. Pant University, India; M.S., Computer Science and Engineering, Thaper Institute of Engineering & Technology, India; Ph.D., Computer Science, Wayne State University.

Research Interests: Big data Analytics, Cloud Forensics, Content-based Image Clustering and Retrieval, Anomaly Detection in Computer Network, and Healthcare Fraud Detection.

Dr. DeWayne Brown, Professor

Price Hall 206 / 285-3140 / dbrown@ncat.edu

B.S., Electrical Engineering, University of South Carolina; M.S., Electrical Engineering, North Carolina A&T State University; Ph.D., Electrical Engineering, Virginia Polytechnic Institute and State University.

Research Interests: Wireless Communication, Navigation, and Mathematics for Electronics, Assured Communications for Law Enforcement.

Dr. Gina Bullock, Adjunct Associate Professor

Smith Hall 3001/285-3103/ glbulloc@ncat.edu

B.S., Computer Science, Shaw University, Raleigh; M.S., Computer Science, Concentration: Software Engineering, North Carolina A&T State University, Greensboro; Ph.D., Computational Science and Engineering, North Carolina A&T State University, Greensboro

Research Interests: Multiagent structural health monitoring, Internet of Things, Network Security, Big Data, Data Analysis for Sensor Data, and Security.

Dr. Clay Gloster, Jr., Professor and Chair

Price Hall 203 / 285-3134 / cgloster@ncat.edu

B.S., Electrical Engineering, M.S., Electrical Engineering, North Carolina A&T State University; Ph.D., Computer Engineering, North Carolina State University.

Research Interests: Reconfigurable/adaptive computing, VLSI Design for Testability.

Dr. Cameron Seay, Assistant Professor

Price Hall 201E-2 / 285-3144 / cwseay@ncat.edu

B.A., Economics, M.A. Economics, City University of New York; M.B.A., Computer Information Systems, M.S. Computer Information Systems; Ph.D., Educational Psychology, Georgia State University.

Research Interests: Cloud Computing, Server Virtualization, Mainframe Computers.

Dr. Evelyn Sowells, Assistant Professor

Price Hall 201-E4 / 285-3145 / sowells@ncat.edu

B.S., Computer Science, North Carolina A&T State University; M.S., Computer Science Software Engineering, North Carolina A&T State University; Ph.D., Electrical Engineering, North Carolina A&T State University.

Research Interests: Low-power high performance digital systems design, asynchronous and self-timed digital system design. Particularly, the development of power aware algorithms and techniques for system timing optimization. Specific interests include portable digital electronics and high performance computation. STEM Education and recruitment.

Dr. Li-Shiang Tsay, Assistant Professor

Smith Hall 4017 / 285-3146 / ltsay@ncat.edu

B.A., Software and Information Systems, M.S., Computer Science, Ph.D., Information Technology, University of North Carolina at Charlotte.

Research Interests: Knowledge Discovery and Data Mining, Multimedia Databases, Intelligent Web Search, and Agent-Based Modeling and Complex Adaptive Systems.

Dr. Qing-An Zeng, Associate Professor

Price Hall 211 / 285-3148 / qzeng@ncat.edu

B.S., Electrical Engineering, Chengdu University of Information Technology, China; M.S., Electrical Engineering, Shizuoka University, Japan; Ph.D., Electrical Engineering, Shizuoka University, Japan.

Research Interests: Wireless and Mobile Networks, Sensor Networks, Social Networks, Network Security, Data Analysis, Resource Management, Mobility Management, Vehicle Communications, Internet of Things, Smart Grid, Modeling and Performance Analysis, and Queuing Theory.

Department of Graphic Design Technology

Dr. Vincent Childress, Professor and Interim Chair

Price Hall 116 / 285-3149 / childres@ncat.edu

B.S., M.S., Ph.D., Virginia Polytechnic Institute and State University.

Research Interests: Curriculum Integration, STEM Education, Teacher Professional Development.

Dr. Robert Cobb, Jr., Associate Professor

Smith Hall 4005 / 285-3151 / rcobbjr@ncat.edu

B.S., Virginia Polytechnic Institute and State University; M.S., North Carolina A&T State University; Ph.D., Virginia Polytechnic Institute and State University.

Research Interests: Instructional Technology, Instructional Design, Collaborative Human Resource Development.

Dr. Devang P. Mehta, Associate Professor

Smith Hall 3020 / 285-3109 / mehtad@ncat.edu

B.S., University of Bombay; M.A., DIT, University of Northern Iowa.
Research Interests: Gaming, Animation, Simulation, Website Development, Technology Management, Instructional Design in Graphic Design Technology.

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	334-7567
Technology	
Summer Session	334-7810
Treasurer	334-7721

Important Links

- The Graduate College: http://www.ncat.edu/tgc/
- MSIT, MSTM, MSTM-PSM, Graduate FAQs: http://www.ncat.edu/cost/grad/index.html
- Financial Information: http://www.ncat.edu/tgc/financial/index.html
- PhD in Technology Management: http://indstate.edu/technology/consortphd