# Graduate Handbook



## SCHOOL OF TECHNOLOGY



Master of Science in Information Technology Master of Science in Technology Management Ph.D. in Technology Management

North Carolina A&T State University
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Last Updated: September 2014



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### Part I. Associate Dean's Welcome

### Welcome

It is an honor to welcome you to the School of Technology, Graduate Programs. Our mission is to provide an academically challenging, value based environment that prepares learners to be critical thinkers as Technology Management and Information Technology professionals, global citizens, effective communicators, and responsible leaders and educators in the context of the School of Technology Values.

Technology Management and Information Technology professions are in exciting times as we study and practice in a rapidly changing workforce environment. Through your education in the School of Technology you will be involved in a journey that will provide you with the skills, knowledge, insights and professional experiences required to compete for entry into and succeed at graduate level studies or workforce positions within your preferred profession.

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

The School of Technology offers two masters programs and one Ph.D. program as a consortium with Indiana State University.

To apply, please contact the graduate office.

Sincerely,

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

Professor & Chair Interim Associate Dean of Graduate Programs and Research School of Technology

### **School of Technology Graduate Programs**

### MS in Information Technology

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.

### MS in Technology Management

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.

### Ph.D. in Technology Management

North Carolina A&T State University's School of 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, Quality Systems.

### Part II. The School of 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 School of 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. Our programs are accredited by ATMAE and adhere to quality standards.

You can take your first step to a rewarding career with one of our undergraduate programs: Applied Engineering Technology, Construction Management, 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 School of Technology at North Carolina Agricultural and Technical State University aspires to be a premier School of Technology in solving global challenges.

#### Mission

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

- Creative use of 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

### **School of Technology Forms**

http://www.ncat.edu/academics/schools-colleges1/sot/current-students/Forms/index.html

#### **Graduate school website:**

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

### **School of Graduate Studies: New Student Information**

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

#### **Graduate Tuition**

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

### **Admissions link:**

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

### **Academic Calendar**

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

### Other important information (forms, deadlines etc.):

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

### **List of Important Graduate School forms**

Important forms can be downloaded from Graduate school website or select the links below: http://www.ncat.edu/academics/grad/continuing-students/forms/index.html

- 1) Change of Name form
- 2) Change of Program form
- 3) Transfer of Credit External (fillable pdf)
- 4) Transfer of Credit A&T Courses (fillable pdf)
- 5) Plan of Study (fillable pdf)
- 6) Graduate Assistant Evaluation
- 7) Graduate Assistant Contract (fillable pdf)
- 8) Oral Defense form (fillable pdf)
- 9) Report of Dissertation Committee (fillable pdf)
- 10) In-State Residency Claim Form(fillable pdf)

### Part III. Masters of Science in Information Technology Program

### **Program Overview**

The Master of Science in Information Technology (MSIT: major code: 0337) 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 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 – March 1<sup>st</sup> Spring – September 1<sup>st</sup> 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-office/academic-calendar/

**International Applicants:** In order to be eligible for admission to the Graduate School 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. See http://uncg.interlinkesl.com/ for more information about Interlink.
- Hold a degree from an accredited four-year US college or university.

For additional admission requirements, please visit the Graduate School 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 36 semester hours. The course work option requires students to pass a comprehensive examination. In addition, at least fifty percent (50%) of the credits counted toward the Master of Science in Information Technology degree must be numbered 700 and above and 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 six 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.

Program	Option	Foundation Courses	Management & Technical Course Electives	Comprehensive Examination Courses	Thesis Courses	Total Credits
Information	Thesis	9 credits	15 credits		6 credits	30 credits
Technology	Coursework	9 credits	21 credits	0 credits		30 credits

Foundation Courses	<u>Credits</u>
ITT 700 Project Management for Information Technology Professional	3
ITT 702 Statistical Methods for Information Technology	3
ITT 703 Technical Research Writing & Communication Skills for Information Technology	3
Management Course Electives	
ITT 620 Telecommunications Management	3
ITT 625 Computer Database Management	3
ITT 685 Ethical issues in Information Technology	3
ITT 735 Telecommunication Management Issues	3
ECT 759 Special Topic: Enterprise Management Systems	3
<u>Technical Course Electives</u>	
ITT 605 Principles of Computer Networking	3
ITT 610 Digital Communications I	3
ITT 615 Networking Security Applications	3
ITT 650 Wireless Communication Systems I	3
ITT 655 Optical Communication Systems I	3
ITT 665 Wireless Geo-location Systems I	3
ITT 725 Wide Area Networks	3
ITT 729 Data Warehousing	3
ITT 731 Knowledge Discovery in Databases	3
ITT 745 Network Services for the Enterprise	3
ITT 750 Computer System Security	3
ITT 752 Advanced Computer Forensics	3
ITT 789 Master's Research Project for Information Technology	3
Comprehensive Examination Courses	
ITT 787 Comprehensive Examination	0
<u>Thesis Courses</u>	
ITT 791 Master's Research Thesis for Information Technology I	1
ITT 792 Master's Research Thesis for Information Technology II	1
ITT 793 Master's Research Thesis for Information Technology III	2
ITT 794 Master's Research Thesis for Information Technology IV	2

### **Course Descriptions**

All courses that are offered by the Graduate Program in the School of 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.edu/pls/NCATPROD/bwckctlg.p\_disp\_dyn\_ctlg

### **Research Areas**

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

### Part IV. Masters of Science in Technology Management Program

### **Program Overview**

The School of Technology at North Carolina A&T State University offers a Master of Science in Technology Management (MSTM: major code - 390) degree. This program is coordinated by the School of 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**

An applicant may be given unconditional admission to the MSTM Program if he/she possesses a Bachelor's degree 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 – March 1st Spring – 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-office/academic-calendar/

International Applicants: In order to be eligible for admission to the Graduate School 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:

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- 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. See http://uncg.interlinkesl.com/ for more information about Interlink.

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

### For additional admission requirements, please visit the Graduate School 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. The coursework option requires students to pass a comprehensive examination. In addition, at least fifty percent (50%) of the credits counted towards the Master of Science in Technology Management degree must be numbered 700 and above and 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 six 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.

Program	Option	Foundation Courses	Management & Technical Course Electives	Comprehensive Examination Course	Thesis Courses	Total Credits
Technology	Thesis	9 credits	15 credits		6 credits	30 credits
Management	Coursework	9 credits	21 credits	0 credits		30 credits

Foundation Courses			
MSTM 702 Enterprise Resource Plan Sys	3		
MSTM 703 Statis and Prob in Tech Manage	3		
MSTM 704 Research Meth for Tech Manage	3		
Management Electives			
AET 614 Industrial Logistics	3		
CM 692 Project Management	3		
CM 781 Risk Management	3		
ECT 759 Special Topic: Enterprise Management Systems	3		
GCS 637 Industrial and Customer Relations	3		
ITT 620 Telecommunications Management	3		
ITT 625 Computer Database Management	3		
ITT 685 Ethical issues in Information Technology	3		
ITT 735 Telecommunication Management Issues	3		
OSH 708 OSH Management			
TECH 671 Methods and Techniques of Workplace Training and Development	3		
*In addition, any graduate course from School of Business and Economics			
<u>Technical Electives</u>			
AET 610 Six Sigma	3		
AET 613 Supply Chain	3		
AET 674 Advanced Automation and Control	3		
AET 710 Manufacturing Materials	3		
AET 780 Reliability Testing and Analysis			
CM 678 Real Estate and Land Development			
CM 708 Construction Cost Estimating and Project controls			
CM 710 Advanced Construction Practices and Organization			
CM 720 Construction Contracts Administration			
CM 785 Construction Economics			
CM 786 Construction Trends and analysis	3		
GCS 630 Multimedia and Videography	3		

GCS 632 Graphic Animation	3	
ITT 605 Principles of Computer Networking	3	
ITT 610 Digital Communications I	3	
ITT 615 Networking Security Applications	3	
ITT 650 Wireless Communication Systems I	3	
ITT 655 Optical Communication Systems I	3	
ITT 665 Wireless Geo-location Systems I	3	
ITT 725 Wide Area Networks	3	
ITT 729 Data Warehousing	3	
ITT 731 Knowledge Discovery in Databases	3	
ITT 745 Network Services for the Enterprise	3	
ITT 750 Computer System Security	3	
ITT 752 Advanced Computer Forensics	3	
MSTM 789 Master's Degree Project		
OSH 700 Special Problems in Occupational Safety & Health		
OSH 704 Occupational Epidemiology	3	
OSH 706 Noise control	3	
OSH 731 Toxicology for the Industrial Hygienist	3	
TECH 708 Impacts of Technology	3	
TECH 717 Special Problems I	3	
TECH 718 Special Problems II	3	
Comprehensive, Internship, & Thesis Courses		
MSTM 750 Internship	3	
MSTM 791 Thesis I	3	
MSTM 792 Thesis II	3	
MSTM 788 Comp Examination	0	

### **Course Descriptions**

All courses that are offered by the Graduate Program in the School of 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.edu/pls/NCATPROD/bwckctlg.p\_disp\_dyn\_ctlg

### Part V. Ph.D. in Technology Management

### **Program Overview**

The Ph.D. in Technology Management consists of a minimum of 90 hours of course work and research at the post-baccalaureate level. Included is course work in a general technology core, a research core, a technical specialization, an internship, a residency requirement, and a dissertation.

The PhD in Technology Management program is presented as a model with four areas of required study. Courses are not identified, but topical areas of study are given, to assist the Graduate Consortium Coordinating Council in defining the parameters of an area of study. Examples of major areas of specialization were developed in greater detail as part of the proposal development process. These, and additional major areas of specialization, will be developed by the consortium universities that will offer the specialization. In all cases, the Graduate Consortium Coordinating Council is the governing body responsible for approval of curriculum.

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
<b>Professional Studies</b>	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 mailed to the School of Graduate Studies at Indiana State University. The on-line application can be found at www.indstate.edu/grad/applications.html.

- 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 Mr. George McCormick at gmccormi@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 to apply:

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

### Application materials must include:

- Indiana State University College of Graduate and Professional Studies Application form
- \$35.00 application fee.
- 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.
  - 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
  - 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:

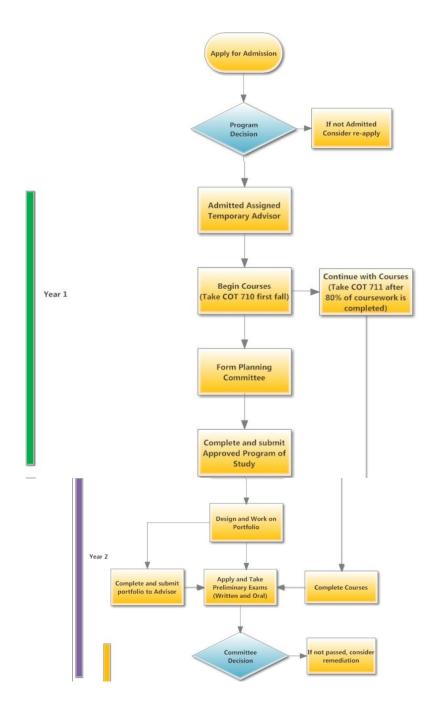
- Advising the PhD Program Director in writing that an appeal is being made regarding admission status and submitting both the original application materials plus any additional supporting materials.
- An Appeals Review Committee composed of three members of the PhD Council and two representatives of 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.

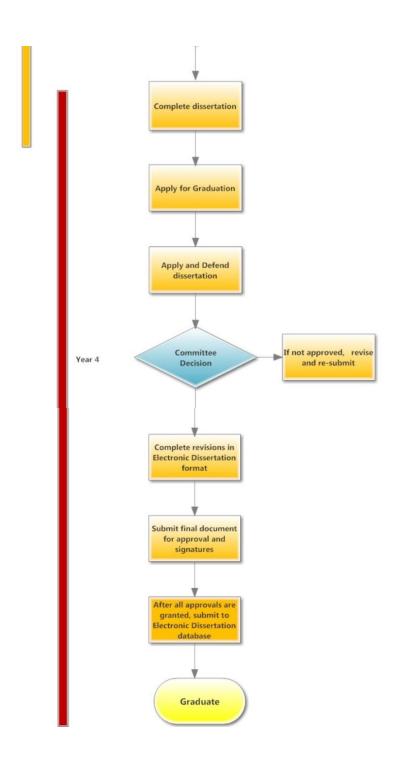
### Program Curriculum Guide

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.





### **Course Descriptions and Catalog**

Link: http://catalog.indstate.edu/preview\_program.php?catoid=14&poid=2067&returnto=315

### 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

### Office Hours

Monday-Friday 8:00 AM - 4:30 PM

### **Faculty Contact Information**

Link:

http://technology.indstate.edu/consortphd/facstaff/index.htm

First Name	Last Name	Specialization
Richard	Baker	Construction Management
Karl	Burgher	Construction Management
David P.	Beach	Digital Communication
Gerald W.	Cockrell	Digital Communication
Robert E.	English	Digital Communication
Yuetong	Lin	Digital Communication
Xiaolong	Li	Digital Communication Systems
Cindy	Crowder	HRD and Training
Bassou	El Mansour	HRD and Training
Barbaba	Eversole	HRD and Training
Carroll	Graham	HRD and Training
George	Maughan	HRD and Training
Alina	Waite	HRD and Training
Randell	Peters	HRD and Training, Manufacturing Systems
Marion D.	Schafer	Manufacturing Systems
Ali Mehran	Shahhosseini	Manufacturing Systems
James E.	Smallwood	Manufacturing Systems
M. Affan	Badar	Manufacturing Systems; Quality systems
Michael A.	Hayden	Quality Systems and Manufacturing Systems
W. Tad	Foster	Human Resource Development, Manufacturing Systems

### Part VI. Graduate Academic Policies & Procedures

### **A&T Graduate School Handbook**

All guidelines and procedures concerning graduate school can be found in the NC A&T State University Graduate Handbook located at the following link:

http://www.ncat.edu/student-affairs/student-services/dean/assets/downloads/student-handbook.pdf Navigation

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

### Indiana State University Graduate Handbook

Link:

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

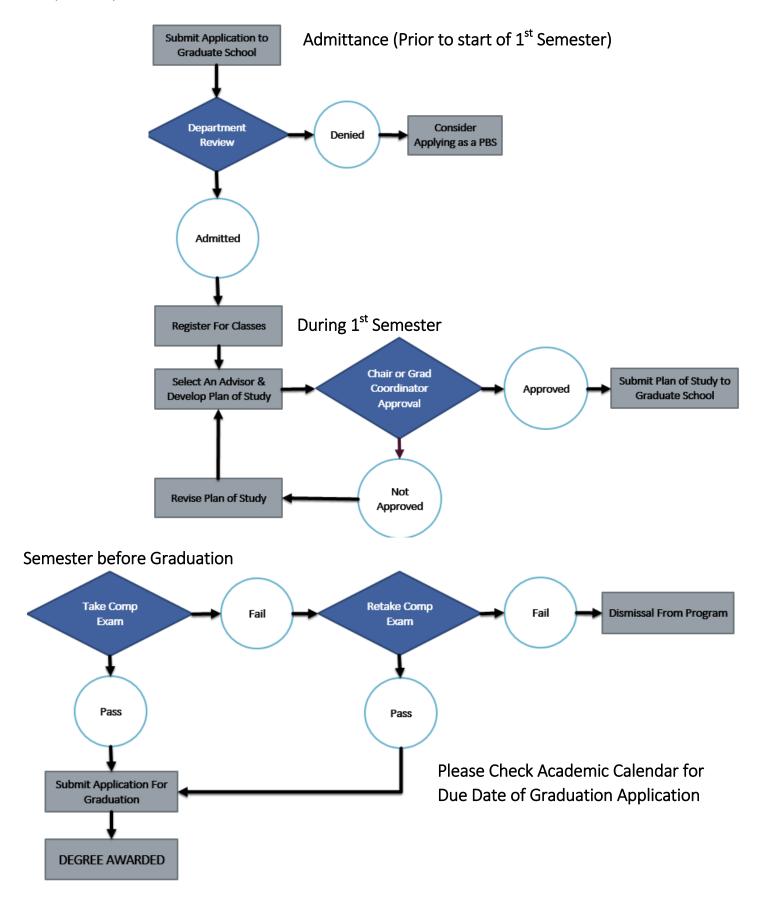
### **Email Accounts**

All School of 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.

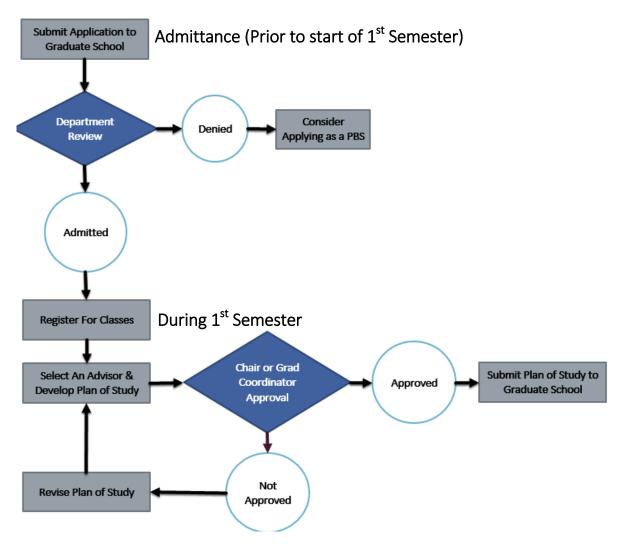
### **Graduate School Council**

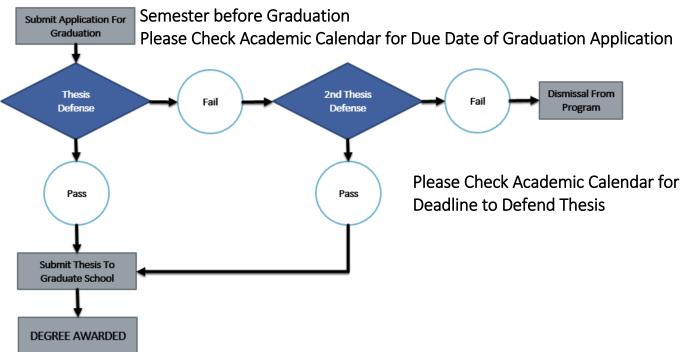
Advisor, Sharon Hoard – (336) 285-2711 Murphy Hall Room 104 www.ncat.edu > Academics > The Graduate School > Continuing Students > Graduate Student Council

### MS (IT & TM) Coursework Path



### 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/academics/schools-colleges1/grad/continuing-students/forms/index.html www.ncat.edu > Academics > The Graduate School > 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 School 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://www.ncat.edu/divisions/business-and-finance/aux-services/bookstore/.
- 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/academics/schools-colleges1/grad/continuing-students/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 School 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/academics/schools-colleges1/grad/continuing-students/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 School > 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 School, 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)

### **Graduate Assistantships**

### **Applying**

As part of its drive to enhance research and graduate education, North Carolina A&T 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 School of 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. School of 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

### Instructional Linux Lab (Price Hall 202)

Supports the study of Linux computing, robotics, and programming.

Equipment Provided: 16 Linux powered Raspberry Pi

### 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 School of 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.

Dr. Ji Y. Shen, Professor and Chair

Price Hall 100 / 285-3158 / shen@ncat.edu

B.S., Northwestern Polytechnic University; M.S., Nanjing Aeronautical University.

Ph.D., Old Dominion University

Research Interests: Structural dynamics and control, material characterization and processing.

### Department of Built Environment

Dr. Christian A. Bock-Hyeng, Assistant Professor

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

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

Dr. Tony E. Graham, Assistant Professor

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

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

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.

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.

Dr. Frank E. Yeboah, Assistant Professor

Price Hall 111 / 285-3133 / feyeboah@ncat.edu

M.E.; Technical University of Clausthal, Germany; D.Eng-Sc.; Columbia University of New York.

### Department of Graphic Systems 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.

Dr. Robert Cobb, Jr., Associate Professor

Price Hall 121 / 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.

Dr. Brenda S. Faison, Associate Professor

Smith Hall 4004 / 285-3108 / bfaison@ncat.edu

B.A., North Carolina Central University; M.P.D., North Carolina State University; Ph.D., The Ohio State University

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.

Dr. Craig Rhodes, Associate Professor

Price Hall 103 / 285-3156 / rhodesc@ncat.edu

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

### **Department of Computer Systems Technology**

Dr. Rajeev Agrawal, Assistant 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. Naser El-Bathy, Assistant Professor

Price Hall 210 / 285-3141 / nielbath@ncat.edu

B.A., Commerce, Cairo University, M.S., Computer Science, Wayne State University, Ph.D., Information Technology, Lawrence Technological University.

Research Interests: Intelligent Web Development Technologies, Artificial Intelligence, Bioinformatics, Service Oriented Architecture (SOA).

### 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. Ibraheem Kateeb, Assistant Professor

Smith Hall 3005 / 285-3104 / kateeb@ncat.edu

B.S., Physics/Mathematics, University of Science and Technology (Yarmouk University); M.S., Electrical Engineering, Ph.D., Electrical Engineering, North Carolina A&T State University.

Research Interests: Renewable Energy and Power/Industrial Electronics and Control.

### 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. 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, Assistant Professor

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

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

Research Interests: Wireless and Mobile Networks, Ad Hoc and Sensor Networks, Mesh Network, Heterogeneous Networks, Handoff, Resource Management, Mobility Management, Wireless Internet, Security, Vehicle Communications, Modeling and Performance Analysis, and Queuing Theory.

## 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 School	285-2366
School of Technology	334-7567
Summer Session	334-7810
Treasurer	334-7721