

INFORMATION TECHNOLOGY, MASTER OF SCIENCE

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The Master of Science in Information Technology (MSIT) is a study of the hardware and software mechanisms used to implement modern information systems. It is designed for students who have little to no educational background in IT but wish to pursue a career in this dynamic and ever-growing field. The MSIT program provides students with a comprehensive education in IT with a rigorous curriculum that covers a range of topics including programming, database, website design, data science, and cybersecurity. Our experienced faculty members provide students with hands-on training in cutting-edge technologies and offer personalized attention to help students achieve their academic and professional goals.

Academic Advisors

The MS-IT Graduate Committee will assign a faculty advisor to each student admitted to the MS-IT degree program. The advisor will assist the student in the design of a curriculum of study that leads to the fulfillment of degree requirements. Additionally, the academic advisor and the Graduate College will monitor the student's progress. It remains, however, the student's responsibility to understand and to satisfy all degree requirements.

Degree Works

Degree Works is a software tool utilized by Arkansas Tech University designed to detail academic progression. It allows both students and advisors to monitor course progress towards degree completion and clearly indicates which course requirements have been met as well as how courses transfer into a program. Transfer courses must be approved through the use of a substitution/waiver form available via the Registrar for progress to display correctly within Degree Works.

Degree Works will display course progression based on the current program of study, but a "what-if" scenario can be generated for any program to see how progression looks with the courses currently completed and in progress. Note that if you have applied to and been admitted to a graduate program while still finishing your undergraduate program, Degree Works will show your new program of study in the graduate program and you would have to generate a "what-if" query to see your undergraduate degree progress.

Application for Graduation

In addition to satisfying all degree requirements, a candidate for a degree must file an Application for Graduation (https://www.atu.edu/registrar/forms/grad_app-masters.pdf) online or at the Graduate College. Students must apply for graduation upon completion of fifteen (15) graduate credit hours.

Special Conditions of Graduate Credit Graduate Credit Taken Prior to Admission to Arkansas Tech University

A maximum of six (6) semester hours of graduate credit with a grade point average of "B" or better may be transferred from an accredited graduate school if deemed appropriate to the MS-IT Graduate Committee, the Director of the MSIT program, and the Graduate College Dean. Students must send a written request through the MSIT Graduate Committee and program director to petition an acceptance of the transfer credit prior to requesting admission to candidacy to the graduate program. Graduate credit earned six (6) years prior to the completion date of all degree requirements may not be applied toward the degree without the approval of the MS-IT program director and the Graduate College Dean. Credits earned by correspondence courses or for remedial purposes will not apply toward the graduate degree. No undergraduate course may be repeated for graduate credit.

Graduate Credit Taken After Admission to Arkansas Tech University

If after admission to graduate study, a student wishes to take a course at another institution to count toward degree requirements at Arkansas Tech University, the student must (in advance of enrollment) obtain written approval from the MS-IT program director and the Graduate College Dean.

Additional Admission Requirements Unconditional Admission

Students are eligible to apply for unconditional admission to the Master of Science degree program in Information Technology if they meet all of the following requirements:

1. Applicants must meet the admission requirements for Graduate College (<https://catalog.atu.edu/graduate/admission/>).
2. Applicants must have successfully completed one math course beyond college algebra.
3. Applicants must have successfully completed two semesters of computer programming courses comparable to our COMS 1013 Programming Foundations I/COMS 1011 Programming Foundations I Lab **and** COMS 2203 Programming Foundations II or INFT 5103 Python Programming.
4. Applicants must have an overall minimum GPA of 3.0 for their undergraduate studies.
5. Approval from the Program Director.

Conditional Admission

Applicants who fail to satisfy the requirements above may be admitted conditionally by the MS-IT Graduate Committee to earn a maximum of twelve (12) hours of graduate credit. Conditional admission may require taking one or more undergraduate and/or graduate courses to remove those conditions. Any such courses must be completed with a grade of "B" or better. In addition, if the student was admitted conditionally due to grade point average, the student must earn a 3.0 or better cumulative grade point average in all graduate courses taken for the program by the end of the semester in which the twelfth (12) graduate hours is completed.

Curriculum Degree Requirements

- The completion of 30 hours of graduate work of which at least 15 credit hours must be at the 6000 level where the student meets the below requirements:

Code	Title	Hours
MSIT Core Requirements		
INFT 5203	Database Systems	3
INFT 5413	Computer Systems and Architecture	3
INFT 5703	Principles of Networking	3
MSIT Elective Requirements		
Select a maximum of two elective courses (six credit hours) at the 5000 level from the following:		6
INFT 5103	Python Programming	
INFT 5303	Developing and Administering Web Sites	
INFT 5403	Introduction to Information Technology and Systems	
INFT 5503	The UNIX Operating System	
INFT 5603	Principles of Data Science	
INFT 5803	Principles of Cybersecurity	
INFT 5983	Special Topics	
Select a minimum of three elective courses (9-12 credit hours) at 9-12 the 6000 level from the following:		
INFT 6103	ADV PYTHON PROGRAMMING	
INFT 6203	Database Development and Administration	
INFT 6303	Design of Web-Based Information Systems	
INFT 6403	Information Security Systems Analysis and Design	
INFT 6603	Advanced Data Science and Machine Learning	
INFT 6703/6700	Advanced Networks	
INFT 6803	Advanced Cybersecurity	
INFT 6903	Emerging Trends (Topic varies so may be repeated for credit)	
Options		
Select one of the following options:		3-6
Option I (Internship):		
INFT 6993	Internship (3-6 hours)	
Option II (Thesis):		
INFT 6973 & INFT 6983	Thesis Research in Information Technology I and Thesis Research in Information Technology II	
Total Hours		27-33

- A cumulative grade point average of at least 3.00 in all graduate courses completed at Arkansas Tech University with a maximum of six (6) hours of "C" grades. A student receiving more than six (6) hours of "C" or grades lower than "C" should refer to the section of the catalog on Academic Probation and Dismissal (<https://catalog.atu.edu/graduate/academic-information/>).
- A minimum of 24 hours of graduate course work completed at Arkansas Tech University.
- Completion of all degree requirements within six (6) years of admission into the program.

Graduate Certificate in Information Technology

The Graduate Certificate in Information Technology provides flexibility for students wanting to gain foundation skills in popular areas of Information Technology, such as database systems, website design, and networking. This certificate may be completed concurrently with the master's degree in Information Technology.

- Certificate Requirements:** Students are free to choose the six courses (18 credit hours) that interest them from a list of approved electives, see below:

Code	Title	Hours
Approved 5000 Level Electives		
INFT 5103	Python Programming	3
INFT 5303	Developing and Administering Web Sites	3
INFT 5403	Introduction to Information Technology and Systems	3
INFT 5503	The UNIX Operating System	3
INFT 5603	Principles of Data Science	3
INFT 5803	Principles of Cybersecurity	3
INFT 5983	Special Topics ¹	3
Approved 6000 Level Electives ²		
INFT 6103	ADV PYTHON PROGRAMMING	3
INFT 6203	Database Development and Administration	3
INFT 6303	Design of Web-Based Information Systems	3
INFT 6403	Information Security Systems Analysis and Design	3
INFT 6603	Advanced Data Science and Machine Learning	3
INFT 6703	Advanced Networks	3
INFT 6803	Advanced Cybersecurity	3
INFT 6903	Emerging Trends ³	3

- A cumulative grade point average of at least 3.00 in all graduate courses completed at ATU with a maximum of six (6) hours of "C" grades. A student receiving more than six (6) hours of "C" or grades lower than "C" should refer to the section of the catalog on Academic Probation and Dismissal (<https://catalog.atu.edu/graduate/academic-information/>).
- A minimum of 15 hours of graduate course work completed at ATU.
- Completion of all certificate requirements within six (6) years of admission into the program.

¹ Special Topics courses may be repeated for credit if the topic is different.

² 6000 level INFT courses often have prerequisites that must be satisfied before enrolling.

³ Emerging Trends courses may be repeated for credit if the topic is different.