# **DEGREE PROGRAMS**

# MASTER OF SCIENCE IN INFORMATION TECHNOLOGY

The Master of Science in Information Technology (MS-IT) is a study of the hardware and software mechanisms used to implement modern information systems. It includes coverage of local-area networks, databases, operating systems, the Internet, the web, and IT management. The student is offered two specialty programs: one in Computer-Based Instructional Technology (CBIT), and one in Information Technology (IT). Each program is built around a common core of three important technologies: networking, web development, database design and implementation.

The Computer-Based Instructional Technology (CBIT) specialty program enables a student to complete the degree through course-work directed to showing the application of computing technology to instruction.

The Information Technology (IT) specialty program is intended for students pursuing a career in technical support for information systems. The focus is on an integrated study of networking, databases, and the web.

#### **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.
- 2 .Applicants must have a background comparable to COMS 1003 and COMS 1403 (see undergraduate catalog for course descriptions), which includes familiarity with terminology and concepts related to word processing, spreadsheets, and databases. This background may be demonstrated by previous coursework, work experience, or by taking a test administered by the MS-IT Graduate Committee.
- 3 .Applicants must have successfully completed one math course beyond college algebra.
- 4 .Applicants for the CBIT program must have successfully completed one semester of computer programming comparable to COMS 2104. Applicants for the IT program must have successfully completed two semesters of computer programming courses comparable to COMS 2104 and COMS 2203.
- 5 .Applicants must submit recent (within the last 5 years), acceptable scores (to be determined by the faculty) of the Graduate Record Examination (GRE) to the Graduate College.
- 6 .Approval from the Program Director.

#### **Conditional Admission**

Applicants who fail to satisfy the grade point requirements for unconditional admission or who do not satisfy requirements 2-6 above may be admitted conditionally by the MS-IT Graduate Committee to earn a maximum of twelve (12) hours of graduate credit. Applicants without GRE are not eligible for conditional admission. 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.

## **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 Requirements**

1 .The completion of 30 hours of graduate work of which include 18 semester hours in MSIT core requirements plus requirements for the Computer-Based Instructional Technology (CBIT) or the Informational Technology (IT) specialty program. A minimum of 18 of the total hours must be at the 6000 level.

MSIT Core Requirements (18 hours)

INFT 5203 Database Systems

INFT 5303 Developing and Administering Web Sites

**INFT 5703 Principles of Networking** 

Plus completion of nine (9) semester hours from the following courses:

**INFT 5103 Software Development** 

INFT 5503 The UNIX Operating System

INFT 5403 Introduction to Information Technology and Systems

INFT 5413 Computer Systems and Architecture

#### Information Technology (IT) Requirements (18 hours)

Completion of 9 semester hours of the following courses and one of the three options

INFT 6203 Database Development and Administration

INFT 6303 Design of Web-Based Information Systems

INFT 6403 Information Systems Analysis and Design

INFT 6703 Advanced Networks

#### Option I (Internship):

3-8 hours of INFT 6000 level elective courses (depending on the internship)

3-6 hours internship

### Option II (Thesis):

3 hours of INFT 6000-level elective courses

6 hours Thesis Research (INFT 6973 Thesis Research in Information Technology I and INFT 6983 Thesis Research in Information Technology II)

### Option III (Comprehensive Examinations):

9 hours of INFT 6000-level elective courses

The successful completion of written comprehensive examinations.

- 2 .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.
- 3 .A minimum of 27 hours of graduate course work completed at Arkansas Tech University.
- 4. Completion of all degree requirements within four (4) years of admission into the program.

Graduate Certificate in Information Technology (18 hours)

INFT 5203 Database Systems

INFT 5303 Developing and Administering Web Sites

INFT 5703 Principles of Networking

INFT 5403 Introduction to Information Technology and Systems

INFT 6903 Emerging Trends

INFT 6903 Emerging Trends

#### **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 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 nine (9) 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.