

## Master of Science in Management Information Systems Program

The Master of Science in Management Information Systems (MSMIS) program is designed to prepare students for careers in the analysis, design, implementation, and management of information systems and information technology (IT). The program, which consists of 36 semester credit hours, offers three tracks: Information Systems Management, Digital Business and Knowledge Management, and Information Security Management. For these three tracks, the program requires 15 credit hours of core courses, 6 credit hours of research or practicum courses, and 15 credit hours of elective courses.

Most students are able to complete the MSMIS degree program in two years or less.

### Admission Requirements

Applicants must submit evidence of completion of a baccalaureate degree from an accredited institution, have a minimum cumulative GPA of 2.5, and satisfy other general admission requirements established by the Graduate School. Applicants must submit a resume, a one-page summary of interest and demonstration of interest in information/technology/information systems and their applications. Applicants must submit two letters of reference (one of which should be from a previous college instructor). The undergraduate degree coursework should include College Algebra, Statistics or Quantitative Methods, a Programming Language, Management, and Computer Applications. Applicants who do not meet the requisite conditions may be granted conditional admission and may be required to complete some or all of the following foundation courses:

- MGMT 241 – Principles of Management
- BUIS 360 – Information Systems for Management
- BUIS 362 – Database for Business
- ECON 351 – Business and Economic Statistics or ECON 483 – Quantitative Methods for Decision Making
- INSS 505 – Object Oriented Programming or other computer programming course
- INSS 510 – Computer Concepts

Students who have some work experience in the  
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information systems or [information technology](#) field, but do not have the requisite academic background may qualify for admission to the MSMIS program.

### Degree Requirements

A minimum of 36 semester hours consisting of 15 credit hours of core, 6 credit hours of research or practicum courses, and 15 credit hours of elective courses are needed to satisfy the degree requirements.

### Core Courses (15 Credits)

INSS 615 – Principles and Practices of Information Systems Development \*

INSS 630 – Information Systems in Organizations\*

INSS 638 – Data Communications and Networks\*

INSS 640 – Information Systems Analysis & Design\*

INSS 650 – Database Management and Decision Systems\*

\*Courses recommended to be completed before attempting the comprehensive examination (INSS 799).

### Practicum or Research (Thesis) Option (6 Credits):

Once the student passes the qualifying examination, he or she would select either the research (thesis) or practicum option. The student then takes 6 credit hours of courses associated with the chosen option.

### Practicum Option:

INSS 880 – Information Systems Practicum

INSS 888 – Information Systems Practicum II

### Research (Thesis) Option:

INSS 890 – Professional Seminar

INSS 898 – Directed Thesis Research

Electives Courses (15 credits): Based on the track, the student will, under the guidance of his/her academic advisor, select 15 credit hours from the following list of elective courses.

### Elective Courses

#### Information Systems Management Track (15 credits)

INSS 720 – Information Systems Policy

INSS 730 – Strategic Information Management

INSS 733 – Business Process and Change Management

INSS 740 – Advanced Object-Oriented Analysis and Design

INSS 745 – Systems Problem Solving Methods

INSS 775 – Information Systems Project Management

INSS 776 – Principles of Enterprise Architecture

INSS 825 – Issues in Information Systems Management

*INSS 735 – Information Systems Security*

*INSS 887 – Emerging Issues in Information Security Management*

#### Digital Business and Knowledge Management Track (15 credits)

INSS 662 – Decision Support and Intelligent Decision Systems

INSS 663 – Electronic Commerce and e-Business Technologies

INSS 658 – Health Informatics

INSS 673 – Fundamentals of Digital Business Strategy

INSS 715 – Knowledge Management Systems

INSS 750 – Database and Distributed Systems Security

INSS 755 – Data Warehousing and Mining

INSS 885 – Special Topics: e-Business Venture Creation

INSS 895 – Emerging Issues in Digital Business and Knowledge Management

*INSS 735 – Information Systems Security*

*INSS 773 – Digital Business Security*

*INSS 775 – Information Systems Project Management*

*INSS 825 – Issues in Information Systems Management*

*INSS 887 – Emerging Issues in Information Security Management*

#### Information Security Management Track (15 credits)

INSS 636 – Information Systems and Telecommunications

INSS 735 – Information Systems Security

INSS 765 – Information Measures

INSS 770 – Auditing, Monitoring, and Intrusion Detection

INSS 773 – Digital Business Security

INSS 777 – Advanced Information and Network Security

INSS 778 – Information Security Risk Management

INSS 779 – Advanced Information Assurance

INSS 887 – Emerging Issues in Information Security Management

*INSS 750 – Database and Distributed Systems Security*

*INSS 775 – Information Systems Project Management*

*INSS 825 – Issues in Information Systems Management*

## **Curriculum Sequence**

The following sequence represents a typical selection of courses. The recommended course sequence is as follows:

### ***First and Second Semesters***

INSS 615 - Principles and Practices of Information Systems Development

INSS 630 - Information Systems in Organizations

INSS 638 - Data Communications and Networks

INSS 640 - Information Systems Analysis and Design

INSS 650 - Database Management and Decision Systems

Elective (1 course)

### ***Third and Fourth Semesters***

Qualifying Examination

Electives (4 courses)

The two courses for Practicum Option OR the two courses for Research (Thesis) Option

## **Program of Study**

Each student is required to develop a Program of Study in consultation with his/her advisor, during the first semester of enrollment. The program of study designates the student's track selection and is required for advancement to candidacy. Students are strongly encouraged to seek the guidance of the faculty in the preparation of the program of study.

## **Advancement to Candidacy**

Upon completion of **fifteen (15) hours of core coursework**, the student should apply for advancement to candidacy. The minimum GPA for Advancement to Candidacy is **3.25**. Students who fail to meet the minimum GPA requirement will be denied Advancement to Candidacy. Other university requirements may apply.

## **Qualifying Examination**

To be eligible to take the Qualifying Examination in the Information Systems Management, Digital Business and Knowledge Management, or Information Security Management tracks, a student must have completed the core courses INSS 615, INSS 630, INSS 638, INSS 640 and

INSS 650, and must have been advanced to candidacy. Students have two chances to take and pass the exam.

## **Information Systems Analyst Certificate Program**

The admission requirements are the same for both the graduate certificate and master's degree programs. The purpose of the certificate program is to prepare management professionals to serve as the liaison between functional units and the information processing/computer operations unit in organizations. The certificate program emphasizes the assessment of information management needs and the design of systems to meet those needs. Requirements for the certificate are 15 credit hours. The requisite courses are listed below:

INSS 615 - Principles and Practices of Information Systems Development

INSS 630 - Information Systems in Organizations

INSS 640 - Information Systems Analysis & Design

INSS 650 - Database Management & Decision Systems

INSS 775 – Information Systems Project Management

(It is recommended that the student apply for the Certificate while still enrolled in the program but after the completion of the required courses.)

Students who do not have a solid background in computer or information systems will be required to complete INSS 510 and/or INSS 505 as a prerequisite course.



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## **Master of Science in Management Information Systems Program & Information System Analyst Certificate Program**

