

# NJIT

New Jersey's Science &  
Technology University

*THE EDGE IN KNOWLEDGE*

## The Master of Science Program in Information Systems



Department of Information Systems

College of Computing Sciences

**New Jersey Institute of Technology**

## WHY PURSUE A MASTER'S IN INFORMATION SYSTEMS?

Careers in computing and information technology - systems analysts, software engineers, and network and database administrators -- are projected by the U.S. Department of Labor to be the fastest growing professions through 2012. Because computer technology is so prevalent in products, services, and systems, information systems professionals are needed in almost every industry. New opportunities develop rapidly as each change or improvement in technology engenders new areas of specialization. To remain competitive, companies continue to install sophisticated computer networks and set up more complex Internet and intranet sites. In addition, the security of computer networks continues to increase in importance as more business is conducted over the Internet. Organizations need to understand how their systems are vulnerable and how to protect their infrastructure and Internet sites from hackers, viruses, and other acts of cyberterrorism, making network security specialists increasingly important to organizations.

## WHY STUDY INFORMATION SYSTEMS AT NJIT?

NJIT has a long history of innovation in digital communications. With one of the most computing intensive campuses in the world, NJIT has pioneered in the applications of new technologies as learning tools. The university educates one of the largest groups of information technology students in the nation. Not coincidentally, New Jersey is one of the leading states for computing and high technology businesses. Thirty of the nation's fastest growing technology companies are based in the state, and New Jersey ranks 7th in the nation as a cyberstate and 8th for venture capital investment - \$3.5 billion - in information technology and software. New Jersey offers the highest median salary in the nation for information systems managers.

### WHAT DOES THE PROGRAM COVER?

NJIT's Master's in Information Systems provides a solid grounding in three principal areas: systems analysis and software engineering; information and communication technologies; and management of information systems.

### WHAT SPECIALIZATIONS ARE AVAILABLE?

Students may specialize in:

- Data Management
- Decision Making and Knowledge Management
- Electronic Commerce
- Emergency Management
- Human-Computer Interaction
- Network Management
- Security
- Software Systems
- Systems Analysis and Design

### WHERE IS THE PROGRAM OFFERED?

- NJIT's Newark campus
- Customized courses at business locations
- Via distance learning

### DO STUDENTS HAVE OPPORTUNITIES FOR RESEARCH?

The program provides exposure to state-of-the-art information systems research, so that students will be prepared to work with both emerging concepts and technologies. There are also ample opportunities for students to participate directly in ongoing projects. The department's research focuses on three areas:

- Systems Design and Information Management
- Collaborative and Learning Systems

- Human-Computer Interaction

Major current projects include: SmartCampus, a prototype large-scale wireless campus community system; virtual library systems; and information systems for crisis management.

### PROGRAM SUMMARY

Degree Awarded: Master of Science in Information Systems

Credits Required: 30

Program Objective: To train students in the relationships between people and computers emphasizing both the technology and the understanding of human behavior in the computing environment.

### SUMMARY OF ADMISSIONS REQUIREMENTS

Undergraduate degree in information systems, management information systems, information technology, computer science or computer engineering. (Those with degrees in other areas may qualify via a bridge program.)

GPA of 2.8 on a 4.0 scale required

TOEFL score of 550 (international students)

GRE or GMAT required for students without a prior U.S. bachelor's or master's degree.

### Core Courses

- IS 677 Information Systems Principles
- IS 663 Systems Analysis and Design
- CS 631 Data Management System Design
- IS 679 Management of Information Systems
- CS 652 Computer Networks-Architectures, Protocols and Standards
- HRM 601 Organizational Behavior

### FOR FURTHER INFORMATION, CONTACT:

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For an application, contact the Office of Graduate Admissions,  
(973) 596-3300 or on-line at  
[www.njit.edu/admissions/graduate/apply-online.php](http://www.njit.edu/admissions/graduate/apply-online.php)