INFORMATION TECHNOLOGY AND MANAGEMENT

Perlstein Hall, Room 223
10 W. 33rd St.
Chicago, IL 60616
312.567.5290
appliedtech.iit.edu/information-technology-and-management

Daniel F. and Ada L. Rice Campus
201 E. Loop Rd.
Wheaton, IL 60189
630.682.6000

Dean and Chair
C. Robert Carlson

Faculty with Research Interests
For more information regarding faculty visit the Department of Information Technology and Management website.

The mission of the Department of Information Technology and Management is to educate and inform students to prepare them to assume technical and managerial leadership in the information technology and cybersecurity fields. The information technology and management degrees apply a hands-on, reality-based approach to education that allows students to apply what they learn in class to solve real-life problems. Additional courses may be taken from the Chicago-Kent College of Law curriculum to give cybersecurity and forensics practitioners a thorough grounding in legal issues and compliance. The program provides an innovative experience where students work on cutting-edge, industry-sponsored projects. This teaching philosophy prepares students to become innovators, entrepreneurs, and leaders of the future. For some areas of study, it is possible to complete the entire Master of Information Technology and Management degree online.

Laboratories and Research Centers

The School of Applied Technology operates and administers over 400 computers and servers at the Mies and Rice campuses to support teaching, learning and research. Ten laboratories include a networking/network security and computer forensics facility, and a dedicated Real-Time Communications (RTC) facility which includes an entire CISCO VoIP LAN as well as video and mesh wireless capabilities. The security/forensics and RTC laboratories as well as the general-use laboratories provide additional facilities for student projects and applied research, some of which is undertaken in conjunction with industry partners. Some laboratories are available for student use outside of class hours, and one or more laboratories are available for student use weekdays between 10 a.m. and 10 p.m. at the Rice Campus. A wireless network at the Rice Campus provides complete coverage of the campus and operates at all times that the campus is open. Students make extensive use of the network infrastructure provided to support personal notebook computers.

The Center for Cyber Security and Forensics Education

The Center for Cyber Security and Forensics Education (C^{2}SAFE) is a multi-disciplinary center within the School of Applied Technology. The objectives of the Center for Cyber Security and Forensics Education are to:

- Develop, promote and support education and research in cyber security technologies and management, information assurance, and digital forensics across all academic disciplines at Illinois Institute of Technology.
- Engage with business and industry, government, professional associations, and community colleges to enhance knowledge, awareness, and education in cyber security and digital forensics and improve practices in information assurance.
- Coordinate the designation of Illinois Institute of Technology as a National Center of Academic Excellence in Cyber Defense Education by the National Security Agency and the Department of Homeland Security.
- Maintain resources for education and research in cyber security and digital forensics, publish student and faculty research in the field, and sponsor, organize, and conduct conferences and other events to promote and advance cyber security and forensics education.
- Support university academic departments in the delivery of the highest caliber of cyber security and digital forensics education.

The center plans, organizes and conducts the annual ForenSecure conference in the spring of each year, as well as additional activities and student competitions that advance the mission of the center.

The center actively cooperates and coordinates activities with agencies of the federal government and with professional organizations and programs such as the Information Systems Security Association (ISSA), the Information Systems Audit and Control Association (ISACA), the Association of Information Technology Professionals (AITP), the Association for Computing Machinery (ACM), the Institute of Electrical and Electronic Engineers (IEEE), UNIFORUM, CompTIA, Infragard, and others. The center makes every effort to engage in joint activities with these organizations and to encourage them to engage with the center whenever possible.

Resources for education and research as well as published student and faculty research in the form of technical reports and white papers are available on the center's website at ccsafe.iit.edu.

Placement Examinations

Students entering the Master of Information Technology and Management degree program may be required to take placement examinations based on an evaluation of their background and their undergraduate degree program.

Students may be required to demonstrate proficiency in the use of a contemporary object oriented programming language through completion of a programming proficiency examination. Students will be requested to complete a representative set of basic programming tasks and will have a choice of contemporary programming languages in which to complete the tasks; Visual Basic is not an acceptable language for this purpose. References may be consulted, but the test is timed so ability to code is necessary. Students who cannot satisfactorily complete the exam may be required to attend a refresher workshop or short course in their selected programming language, or may be required to complete an ITM programming course; appropriate action will be based on their score on the exam.

Students who are not required to complete the Test of English as a Foreign Language (TOEFL) but have low scores on the GRE verbal may be required to complete an English evaluation. If students cannot pass the examination or evaluation they will be required to enroll in an appropriate PESL course and demonstrate proficiency at course completion.

Accelerated Courses

The program may offer accelerated courses for credit in several areas of information technology and management. Students should see the definition of accelerated courses in this bulletin.

Accelerated courses provide an opportunity for degree-seeking students at the university to complete graduate degree requirements in a shorter time period. If taken by non-degree seeking students, all courses may be later applied toward the Master of Information Technology and Management degree for those who apply and are accepted to the degree program.

Admission Requirements

Applicants for admission to a professional masters degree must have earned a four-year bachelor's degree from an accredited institution with a minimum cumulative undergraduate GPA of 3.0/4.0. International applicants are required to submit a GRE score with a minimum score of 300 (combined quantitative and verbal), 151 quantitative, and 3.0 analytical writing and may be required to submit a TOEFL score (see the Graduate Admission section). Admission as a non-degree student follows the university policy set forth in this bulletin.

Applicants for admission to a master of science degree should hold a four-year bachelor's degree in a computing or computing-related engineering discipline from an accredited institution with a minimum cumulative undergraduate GPA of 3.0/4.0 and minimum GRE score of 305 (combined quantitative and verbal), 151 quantitative, and 3.0 analytical writing; international applicants may be required to submit a TOEFL score (see the Graduate Admission section). Applicants admitted to a master of science degree who do not hold a four-year bachelor's degree in a computing or computing-related engineering discipline may be required to complete up to one year of prerequisite courses prior to beginning formal graduate studies. Students enrolled in undergraduate post-baccalaureate studies (see the Graduate Admission section) may take prerequisite courses as part of that program.

Students whose undergraduate degree is not in a computer-related area or who do not have significant experience or certifications in the information technology field will be required to demonstrate proficiency in undergraduate courses that are prerequisites for the graduate program. Proficiency may be demonstrated by taking and passing a written exam or taking and passing, with a grade of "B" or better, the prerequisite undergraduate courses at Illinois Institute of Technology. Proficiency may also be demonstrated by presentation of documentation of equivalent training or certification; in this case waivers of the prerequisites may only be granted by the graduate adviser or the ITM associate chair.

Current prerequisites for the Master of Information Technology and Management include computer hardware and operating system literacy (ITM 301 or equivalent coursework, certification, or experience) and an ability to program at a basic level using a contemporary programming language (ITM 311 or ITM 312 or equivalent coursework, certification, or experience); basic knowledge of HTML, CSS, and JavaScript (ITMD 361); and the ability to create and administer databases using a modern database management system (ITMD 421).

Current prerequisites for the Master of Cyber Forensics and Security include computer hardware and operating system literacy (ITM 301 or equivalent coursework, certification, or experience); an ability to program at a competent level using a contemporary programming language (ITMD 411 or ITMD 510); basic knowledge of networking concepts, protocols, methods, and the Internet (ITMO 440 or ITMO 540); and the ability to create and administer databases using a modern database management system (ITMD 421).

Current prerequisites for the Master of Science in Information Technology and Management include computer hardware and operating system literacy (ITM 301 or equivalent coursework, certification, or experience) and an ability to program at a basic level using a contemporary programming language (ITM 311 or ITM 312 or equivalent coursework, certification, or experience); basic knowledge of HTML, CSS, and JavaScript (ITMD 361); the ability to create and administer databases using a modern database management system (ITMD 421); and completion of a program of mathematics culminating in a calculus-based course in probability and statistics (MATH 474).

Current prerequisites for the Master of Science in Applied Cybersecurity and Digital Forensics include computer hardware and operating system literacy (ITM 301 or equivalent coursework, certification, or experience); an ability to program at a competent level using a contemporary programming language (ITMD 411 or ITMD 510); basic knowledge of networking concepts, protocols, methods, and the Internet (ITMO 440 or ITMO 540); the ability to create and administer databases using a modern database management system (ITMD 421); and completion of a program of mathematics culminating in a calculus-based course in probability and statistics (MATH 474).

Degrees Offered

- Master of Cyber Forensics and Security
- Master of Information Technology and Management
- Master of Science in Applied Cybersecurity and Digital Forensics
- Master of Science in Information Technology and Management

Certificate Programs

- Advanced Software Development
- Cyber Security Management
- Cyber Security Technologies
- Data Center Operations and Management
- Data Management and Analytics
- Digital Voice and Data Communication Technologies
- Information Technology Innovation, Leadership, and Entrepreneurship
- System Administration
- Systems Analysis
- Web Design and Application Development