M.S. in Information Security

The Master of Science in Information Security (MSIS) program was developed to address the rapidly growing global challenges associated with maintaining and securing computer information. Important areas addressed by the program include threats and vulnerabilities, cryptography, authentication and access control, security models, network security, trusted computer systems, distributed systems security, World Wide Web security, and applications security, as well as security management and policies.

The MSIS degree program is designed for students who want to professionally design, program, enhance, and develop cybersecurity technologies that secure information and systems. Notably, the degree program is recognized by the U.S. National Security Agency and the Department of Homeland Security.

Program Faculty Member

James Cannady, Ph.D., began working in information security while serving as a special agent with the U.S. Naval Criminal Investigative Service. Prior to joining the College of Engineering and Computing, Cannady was a senior research scientist at the Georgia Tech Research Institute and founded the Georgia Tech Information Security Center.

Cannady’s research efforts concern the intersection between artificial intelligence and information security. In particular, he is working to develop new adaptive intelligent systems that can be applied to protect computer systems and advanced neural networks.

Program Alumnus

Employed as a computer scientist with the United States Government, Michael Kozma (M.S. Information Security, 2010), works with and leads teams in support of national security initiatives.

When reviewing U.S. National Security Agency-approved graduate programs, NSU stood out. Five years after graduating, Kozma is still putting into practice what he learned at NSU’s College of Engineering and Computing. “The MSIS program really benefitted me. I’m still going back to what I learned at NSU and putting it to use on a day-to-day basis.”
Curriculum 2015–2016

Total Credits: 36

PREREQUISITE COURSES
Applicants who do not have adequate academic backgrounds may be required to take one or more of the following 500-level graduate courses during the first two terms of the program. (Courses are 3 credits each.)

- MSIT 500 Foundations of Systems
- CISC 500 Java Programming Language
- CISC 501 Assembly Language and Architecture
- CISC 502 Mathematics in Computing
- CISC 503 Data Structures and Algorithms

Core courses and electives are in the following lists. Students must take all 10 core courses and 2 electives. Students who wish to take an additional elective must request approval from the program office prior to registration. Students who opt to do a thesis must take all 10 core courses and 6 thesis credits. Plans for the thesis option must be made in conjunction with, and be approved by, the program office.

DEGREE PROGRAM COURSES

Core Courses (10 courses; 3 credits each)

- CISC 640 Operating Systems
- CISC 650 Computer Networks
- CISC 680 Software Engineering
- MSIT 630 Database Systems
- ISEC 600 Secure Computer Systems
- ISEC 620 Applied Cryptography
- ISEC 640 Database Security
- ISEC 650 Computer and Network Forensics
- ISEC 655 Information Security Governance
- ISEC 660 Advanced Network Security

Electives (two courses; 3 credits each)

Choose any two 600-level courses at the college prefixed RESD, MMIS, MSIT, ISEC, or CISC (except MMIS 630 or 653, MSIT 650, or CISC 660).

This publication should not be viewed as a substitution for official program requirements and outcomes. A student is responsible for meeting the curriculum and program requirements in the Graduate Student Catalog that are in effect when the student enters the program.

Nova Southeastern University admits students of any race, color, sexual orientation, and national or ethnic origin. Nova Southeastern University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate’s, baccalaureate, master’s, educational specialist, doctorate, and professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Nova Southeastern University.