# **COMPUTER SCIENCE**

MASTER OF SCIENCE (M.S.)

# **NSU** Florida

#### At a Glance

■ 10 courses | 30 credit hours

# **Program Formats**

- Fort Lauderdale/Davie Campus
- online

# **Program Highlights**

- Concentrations include software engineering, artificial intelligence, data science, computer systems, information assurance and cybersecurity, and realworld computing.
- Receive quality instruction from CCE faculty members—all of whom hold Ph.D. degrees and are experts in their respective fields of research/ application.

# **Future Opportunities**

Explore careers, such as:

- artificial intelligence engineer
- data scientist
- software engineer
- systems software developer
- user interface designer/developer

# Learn to Solve Complex, Real-World Problems.

Gain thorough knowledge of the computer science field and an enduring foundation for future professional growth. NSU's Master of Science (M.S.) in Computer Science program blends theory and practice into a learning experience that develops skills applicable to complex real-world problems.

Five core courses cover the theory of programming languages, the design and analysis of algorithms, operating systems, database management systems, and software engineering. Then you choose three or more courses in one of the following concentrations: software engineering, artificial intelligence, computer systems, data science, information assurance and cybersecurity, and real-world computing. Any remaining courses can be drawn from our computer science electives options. Alternatively, you can take five elective courses instead.

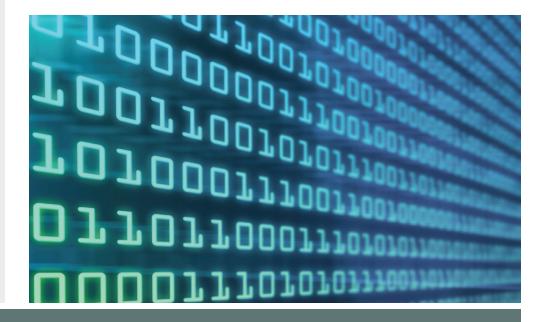
# **Learning Options:**

- Earn your degree in 12–14 months as a full-time student.
- Earn your degree in 16–24 months as a working professional.

# **Admissions Requirements**

- online application (*apply.nova.edu*)
- \$50 application fee (nonrefundable)
- an earned bachelor's degree with a GPA of at least 2.5 from a regionally accredited institution and with an appropriate major
- sealed official transcripts from all institutions attended
- a résumé

International students should visit *computing.nova.edu/admissions* for additional requirements.



Learn More computing.nova.edu

# COMPUTER SCIENCE

MASTER OF SCIENCE (M.S.)

# Curriculum | Total Credits: 30

PREREQUISITE COURSES	Credits
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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.

MSIT	501	Foundations of Programming, Data Structures, and Algorithms	3
CISC	501	Computer Organization and Architecture	3
CISC	502	Mathematics in Computing	3
CISC	503	Data Structures and Algorithms	3

The Master of Science in Computer Science has five concentration options, along with a no concentration option. Students must complete 30 credits. Core courses, concentrations, and electives are listed below. Students who opt to do a thesis will replace two of the elective courses with these credits. Plans for the thesis option must be made with and approved by the program office.

#### **DEGREE PROGRAM COURSES**

#### Core Courses

CISC

685

CISC	610	Programming Languages	3		
CISC	615	Design and Analysis of Algorithms	3		
CISC	640	Operating Systems	3		
CISC	660	Database Management Systems	3		
CISC	680	Software Engineering	3		
Software Engineering Concentration					
CISC	682	Software Requirements Engineering	3		
CISC	683	Object-Oriented Design	3		
CISC	684	Software Testing and Verification	3		

Interaction Design

Artificial Intelligence Concentration			
CISC	662	Data Mining and Knowledge Discovery in Databases	3
CISC	664	Information Retrieval and Web Search Engine Technology	3
CISC	670	Artificial Intelligence	3
CISC	685	Interaction Design	3

#### **Computer Systems Concentration**

CISC	665	Distributed Systems	3
ISEC	660	Advanced Network Security	3
Data S	cience Co	oncentration	
CISC	662	Data Mining and Knowledge Discovery in Databases	3
CISC	664	Information Retrieval and Web Search Engine Technology	3
CISC	672	Data Visualization	3

3

3

## **Information Assurance and Cybersecurity Concentration**

Data Analytics

Computer Networks

Select four courses.

MMIS 671

CISC

650

ISEC	615	Fundamentals of Cybersecurity	3
ISEC	620	Applied Cryptography	3
ISEC	640	Database Security	3
ISEC	650	Computer and Network Forensics	3
ISEC	660	Advanced Network Security	3

#### **Real-World Computing Concentration**

CISC	665	Distributed Systems
CISC	668	Mobile Application Development
CISC	670	Artificial Intelligence
CISC	681	Computer Graphics

#### **No Concentration Option** (5 courses, 3 credits each)

Select a mix of courses from Concentrations and/or Electives.

#### **Electives** (3 credits each)

Any course in the concentrations aforementioned is also an elective course in the program. Additionally, any offerings of CISC 631—Theory of Computation or CISC 690—Special Topics in Computer Science, will count as an elective.

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 student catalog that are in effect when the student enters the program.

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Nova Southeastern University admits students of any race, color, sexual orientation, gender, gender identity, military service, veteran status, 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. 05-013-20MCP

### Admissions

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