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, cyber defense, and real-world 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 More
computing.nova.edu

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 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, cyber defense, 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.

College of Computing and Engineering (CCE)
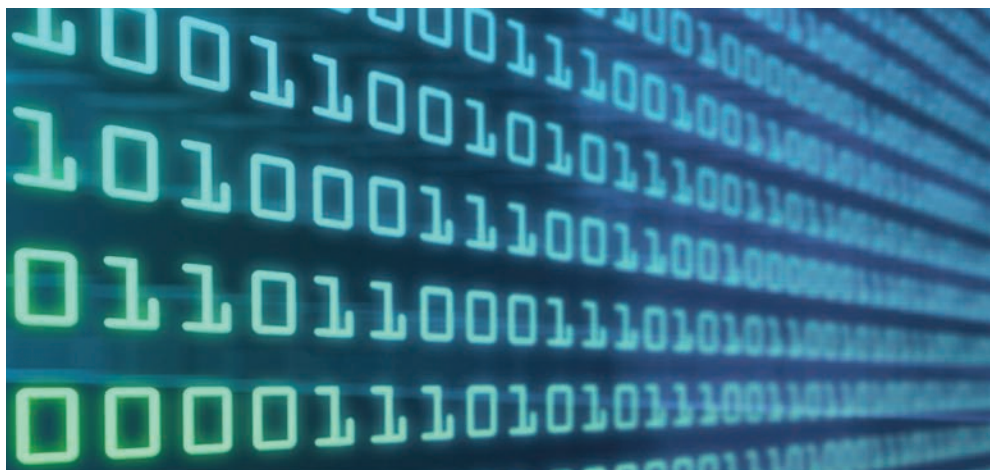
COMPUTER SCIENCE
MASTER OF SCIENCE (M.S.)

Curriculum | Total Credits: 30

PREREQUISITE COURSES   Credits

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 six 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	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

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	650	Computer Networks	3
CISC	665	Distributed Systems	3
ISEC	660	Advanced Network Security	3

Cyber Defense Concentration

Select four courses.

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

Data Science Concentration

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
MMIS	671	Data Analytics	3

Real-World Computing Concentration

CISC	665	Distributed Systems	3
CISC	668	Mobile Application Development	3
CISC	670	Artificial Intelligence	3
CISC	681	Computer Graphics	3

Software Engineering Concentration

CISC	682	Software Requirements Engineering	3
CISC	683	Object-Oriented Design	3
CISC	684	Software Testing and Verification	3
CISC	685	Interaction Design	3

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 aforementioned concentrations 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.

Curriculum is for the 2024–2025 academic year. 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.

Admissions

3300 S. University Drive
Fort Lauderdale, FL 33328-2004
computing.nova.edu/admissions
(954) 262-2031 • 800-986-2247, ext. 22031
computing@nova.edu

College of Computing
and Engineering
NOVA SOUTHEASTERN UNIVERSITY

NSU
Florida