

Master of Science in Computer Science

The STEM-designated MS in Computer Science program is designed for students interested in pursuing computer science theoretically as well as practically at an advanced level. While introducing students to newly developing areas of computer science, this program emphasizes the foundations and concepts of the field. Concepts are developed rather than routine programming skills.

Students interested in the MS Computer Science program at Montclair State University will focus their studies on efficiently programming computers using mathematical algorithms as they prepare for a career as a software developer, web developer or software engineer.

The 30-49-credit program offers both fall and spring starts, and is available full-time on campus.

\$140,910 average salary for computer scientists in 2024

U.S. Bureau of Labor Statistics 2024

#81 Top Public Schools

I was drawn to Montclair for several compelling reasons. One key factor is the university's convenient location, providing an ideal setting for academic and professional growth. Situated in a close proximity to New York, a global hub for technology and innovation, Montclair State University offers unique opportunities for networking, internships, and collaboration with industry leaders. Being an international student, the prospect of immersing myself in the vibrant tech scene of New York is particularly exciting, as it presents a rich environment to apply theoretical knowledge to real-world challenges.

Mustafa - Pakistan

Graduate student

19 kilometers from New York City

120+ student clubs and organizations

Program Highlights

- STEM-designated (eligible for 3 years of OPT)
- Comprehensive and affordable
- Flexible curriculum taught by prominent faculty
- No GRE Required
- Has a focus in programming
- Access to modern infrastructure and computing equipment in the Center for Computing and Information Science
- Designed to accommodate professionals from diverse academic backgrounds
- Students are prepared for professional work in the design and implementation of software systems, database systems, operating systems, artificial intelligence, expert systems, graphics, simulation and algorithms for discrete and continuous structures that will aid in the solution of problems encountered in the scientific and business sector

Career Outcomes

Computer science graduates can go into a wide range of fields. Some of the most common career outcomes are:

- Software Developer
- Web Developer
- UX Designer
- Mobile App Developer
- IT Project Manager
- Information Security Analyst
- Systems Architect
- AI Engineer
- Computer Hardware Engineer
- Video Game Developer
- Computer Scientist
- IT specialist
- Chief Information Security Officer

Sample Courses

This 30-49-credit program consists of many course options to choose from that will help you gain the skills and knowledge you need to help you succeed in your future career.

- Software Engineering
- Computer Architecture
- Computer Algorithms and Analysis
- Research Methods in Computing
- Compiler Construction
- Principles of Secure Programming

- Statistics for Data Science
- Parallel and Distributed Computing
- Robotics
- Human-Computer Interaction (HCI)
- Web Development
- Computer Networks
- Operating Systems



- Application
- Application fee
- Official NACES transcript evaluation
- Official English proficiency test score
- Statement of purpose
- Resume
- Two letters of recommendation

NOTE: Our MS in Computer Science program welcomes students from various academic backgrounds. Admitted students without a background in the field will take bridge coursework (prerequisites) as assigned by the Department. You can be assigned anywhere from 4-16 credits of prerequisite work depending on your background.

- Scalable Distributed Systems
- Text Management
- Mobile Computing
- Python for Data Science
- Big Data Analytics





