

MASTER OF SCIENCE IN COMPUTER SCIENCE— SOFTWARE DEVELOPMENT



The Marist MSCS program provided me the opportunity to make a career change to the software field. I gained a solid programming foundation through a variety of classes upon which I could confidently build my skills to become a desirable software developer.



Jonathan Savas
MS '20

CREATE SOFTWARE THAT DRIVES TODAY'S COMPUTERS AND BUSINESSES

Computer science and software development is a rapidly changing field. Marist provides you with the state-of-the-art skills required for you to excel in the design, development, and implementation of software systems. You will also develop a comprehensive theoretical foundation in computer science.

- ▶ The Virtual Computing Laboratory lets you log into Marist's computers and access software from anywhere with your PC and high-speed internet access – putting the hardware you need at your fingertips and eliminating software compatibility challenges.
- ▶ Courses are provided on our Poughkeepsie campus, primarily in the evenings to accommodate working professionals.
- ▶ Customize your Master's Degree by choosing from two concentrations:
 - ▶ **Cloud Computing**
 - ▶ **Mobile Computing**
- ▶ 8 of 10 jobs listed in *Glass Door's Top Jobs for 2022* come from this degree.

MARIST LEADS THROUGH INNOVATION

- ▶ NYS Center of Excellence in Cloud Computing & Analytics was founded at Marist with a \$3 million state grant.
- ▶ Advanced research is underway in high-performance computing and high-speed computer networks.
- ▶ National Science Foundation-funded computer research laboratory.
- ▶ Marist College is acquiring a cutting-edge IBM z16 system, a state-of-the-art mainframe system, equipped with advanced cybersecurity and AI capabilities integrated at the chip level.

CONTACT US

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UPCOMING EVENTS

The best way to find out about our programs is to attend an open house or virtual information session!
Visit marist.edu/rsvp to RSVP.



SOFTWARE DEVELOPMENT CAREERS

Software developers can find employment in many industries including industrial, business, medical, military, communications, aerospace, scientific, general computing applications, and more. Job titles for professionals in these fields can include:

- ▶ Applications Programmer
- ▶ System Developer
- ▶ Database Designer
- ▶ Network Specialist
- ▶ Project Manager
- ▶ Software Engineer/Developer

CAREER CHANGERS— SPECIAL FAST TRACK PROGRAM

Students who have a Bachelor's degree outside of Computer Science can launch into this career by starting their graduate program with the following four additional courses:

- ▶ MSCS 205 Discrete Mathematics
- ▶ MSCS 501 Object-Oriented Programming
- ▶ MSCS 502 Advanced Data Structures
- ▶ MSCS 503 Computer Organization and Architecture

CURRICULUM

REQUIRED CORE COURSES (16 credits)

- ▶ MSCS 510 Software Design & Development
- ▶ MSCS 542 Database Management Systems
- ▶ MSCS 560 Networking
- ▶ MSCS 630 Security Algorithms & Protocols

TRACKS (Choose one: 8 credits)

CLOUD COMPUTING

- ▶ MSCS 679 Parallel Processing
- ▶ MSCS 621 Cloud Computing

MOBILE COMPUTING

- ▶ MSCS 565 Game Development I
- ▶ MSCS 700 Enterprise Mobile Development

REQUIRED CAPSTONE (4 credits)

- ▶ MSCS 710 Project

ELECTIVE COURSES (Choose one: 4 credits)

- ▶ MSCS 665 Game Development II
- ▶ MSCS 555 Computer Graphics
- ▶ MSCS 550 Artificial Intelligence
- ▶ MSCS 720 Software Verification & Maintenance
- ▶ MSCS XXX Independent Study

ADMISSION REQUIREMENTS

- ▶ Graduate admission application (available online).
- ▶ Official transcripts from your prior undergraduate and graduate colleges.
- ▶ Personal Statement (Approximately 750 words discussing your education, experience, and your interest in attending this program at Marist).
- ▶ Resumé.

For details, please contact
Graduate Admission at

(888) 877-7900
graduate@marist.edu



*Scan to learn more about
this program or to apply.*

ADDITIONAL ADMISSION REQUIREMENTS— INTERNATIONAL BACHELOR'S DEGREES

Provide scans of documents for an admission decision.

- ▶ Undergraduate and graduate transcripts including mark sheets, consolidated mark sheet, and provisional certificate.
 - ▶ Minimum CGPA of 60%, 3/4, or First Class graduation.
 - ▶ Transcripts for degrees outside of the United States, India, Nepal, and Pakistan; require translations to United States grades.
 - ▶ Some 15-year degrees may require translation.
- ▶ English Proficiency minimum scores: Duolingo 115, IELTS 6.5, TOEFL 79, or PTE 58. (Duolingo is online. IELTS, TOEFL, and PTE exams must be taken at test centers.)
- ▶ **GRE is not required.**