Mathematicians apply concepts and formulas to solve real-life situations. They explore connections between mathematics and its application at both the research and education levels, draw conclusions from data, and examine relationships between data and chance. Computers are often used as a tool for analyzing complex or massive data sets.

**Actuarial Mathematics**
- Albany ▲
- Applied Computer Applications
- Finger Lakes ▲

**Applied Mathematics**
- Buffalo State ▲
- Farmingdale ▲
- Fredonia ▲
- Geneseo ▲
- Oswego ▲
- SUNY Poly ▲

**Applied Mathematics and Statistics**
- Stony Brook ▲

**Computer Science & Applied Mathematics**
- Albany ▲

**Liberal Arts & Sciences: Mathematics**
- Cayuga ▲
- Dutchess ▲
- Geneseo ▲
- Nassau ▲
- Suffolk ▲

**Mathematical Economics**
- Oswego ▲

**Mathematics**
- Albany ▲
- Binghamton ▲
- Brockport ▲
- Broome ▲
- Buffalo State ▲
- University at Buffalo ▲
- Cortland ▲
- Erie (North) ▲
- Finger Lakes ▲
- Fredonia ▲
- Geneseo ▲
- Jefferson ▲
- Monroe ▲
- New Paltz ▲
- Old Westbury ▲
- Oneonta ▲
- Oswego ▲
- Plattsburgh ▲
- Potsdam ▲
- Stony Brook ▲

**Mathematics / Computer Science**
- Purchase ▲

**Mathematics: Economics**
- University at Buffalo ▲

**Statistics**
- University at Buffalo ▲
- Oneonta ▲

**COMPUTER PROGRAMMING**
Though closely related, computer software engineering and computer programming have unique responsibilities. Computer programmers work with programming languages like C++, Java or Visual Basic to convert software design into a format that can be processed by computers. They may also repair, update, and test existing programs.

**Computer Applications Programming**
- Mohawk Valley ▲

**Computer Aided Design & Computer Numerical Control**
- Jamestown: Olean ▲

**Computer Aided Design - Technology**
- Morrisville ▲

**Computer Numerical Control Programming**
- Corning ▲

**Computer Programming**
- Sullivan ▲
- Westchester ▲

**Computer Programming & Information Systems**
- Farmingdale ▲

**Game Programming and Design**
- Finger Lakes ▲

**Game & Interactive Design**
- Alfred State ▲
- Game and Development ▲

**Game Design and Development**
- Canton ▲

**Programming for Game Design**
- Schenectady ▲

**INFORMATION TECHNOLOGY MANAGEMENT**
Information technology management consists of emerging programs—such as web design/development, cyber security, forensics, and network management—that reflect the technological society in which we live.

**Animation, Interactive Media & Game Design**
- Fashion Institute of Technology ▲

**Casino Gaming Machine Repair Technician**
- Erie ▲

**Commercial Art: Digital Technologies**
- Nassau ▲

**Computer Applications Specialist**
- Westchester ▲

**Computer Desktop Support Specialist**
- Schenectady County ▲

**Computer Electronics Technology**
- Clinton ▲

**Computer Forensics**
- Onondaga ▲

**Computer Graphics & Design**
- Columbia-Greene ▲
- North Country ▲

**Computer Graphics/Graphic Design**
- Sullivan ▲

**INFO TECH MGMT (cont.)**

**Computer Hardware/Software Design**
- Cayuga ▲

**Computer Repair**
- Geneseo ▲

**Computer Repair Technology**
- Erie ▲
- Nassau ▲

**Computer Science: Cybersecurity**
- Mohawk Valley ▲

**Computer Security**
- Plattsburgh ▲

**Computer Security and Forensics**
- Broome ▲

**Computer Support**
- Clinton ▲
- Rockland ▲
- Sullivan ▲

**Computer Support & Operations**
- Geneseo ▲

**Computer Support Specialist**
- Tompkins Cortland ▲

**Computer Technology**
- Broome ▲
- Clinton ▲

**Computer Web Development**
- Rockland ▲

**Digital Forensics**
- Albany ▲

**Graphic Design: Computer Graphics**
- Sullivan County ▲
- Tompkins Cortland ▲

**Help Desk Support**
- Geneseo ▲
- Hudson Valley ▲

**Information Systems Security**
- Erie (North) ▲

**Office Technology: Information Processing**
- Morrisville ▲

**Web Administration: Webmaster**
- Dutchess ▲

**Web and Mobile Development**
- Finger Lakes ▲

**Web Design**
- Geneseo ▲
- Jamestown ▲

**Web Development**
- Westchester ▲

**Web Development & Information Design**
- Mohawk Valley ▲

**Web Page Design**
- Erie (South) ▲

**Web Technology**
- Onondaga ▲

**Website Design**
- Nassau ▲

**Website Development and Management**
- Broome ▲

Key: ▲ = Bachelor’s Degree   ▲ = Associate Degree   ▲ = Certificate
Information sciences and systems experts design and develop new systems, resolve issues in existing systems, and create and maintain software and hardware solutions that connect communication systems to computer networks. They also keep computer systems current, efficient and secure and communicate with users about technological needs. Professionals may also create games, educational software and business applications—to help clients get the most out of current technology—or repair systems. Those who choose to work in this field may focus on a specific type of computer system, such as engineering, accounting, business or government.

**Applied Computing**
SUNY Poly B
Cisco Certified Entry Networking Technician
Nassau C

**Computer & Information Science**
Old Westbury B
SUNY Poly A

**Computer & Network Security**
Herkimer A

**Computer Information Science**
Corning A

**Computer Information Systems**
Alfred State A
Brockport B
Broome A
Buffalo State B
Canton A
Cayuga A C
Clinton A
Cobleskill A
Columbia-Greene A C
Corning A
Delhi A
Dutchess A
Farmingdale C
Finger Lakes A
Fredonia B
Fulton-Montgomery A
Genese A
Hudson Valley A
Jamestown A
Jefferson A
Mohawk Valley A
Monroe A
Morrisville A
Niagara A
Onondaga A
Schenectady A
Sullivan A
SUNY Poly B
Tompkins Cortland A
Westchester A

**Computer Information Systems: Computer Support**
Rockland A

**Computer Information Systems: Microcomputers**
Nassau C

**Computer Information Technology**
Jefferson A

**Computer Information Technology: Networking**
Orange A

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**Information Sciences and Systems (cont.)**

**Computer Networking**
Dutchess C

**Computer Networking & Cybersecurity**
Fulton-Montgomery A

**Computer Networking Systems & Cyber Security**
Schenectady C

**Computer Science**
Adirondack A
Albany B
Alfred State A
Binghamton B
Brockport B
Broome A
University at Buffalo B
Cayuga A
Columbia-Greene A
Corning A
Delhi A
Dutchess A
Erie (North) A
Farmingdale B
Finger Lakes A
Fredonia B
Fulton-Montgomery A
Herkimer A
Jefferson A
Mohawk Valley A
Monroe A
Nassau A
Niagara A
New Paltz B
Oneonta B
Onondaga A
Orange A
OSWEGO B
Plattsburgh B
Potsdam A
Schenectady A
Stony Brook B
Sullivan A
SUNY Poly B
Tompkins Cortland A
Ulster County A
Westchester A

**Computer Science & Applied Mathematics**
Albany B

**Computer Systems & Network Technologies**
Genese A

**Computer Systems Technology**
Farmingdale C
Monroe A

**Cyber Security**
Alfred State B
Orange A
Rockland A

**Cyber Security/Digital Forensics**
Columbia-Greene A

**Cybersecurity**
Canton B
Corning A
Hudson Valley A
Mohawk Valley C
Nassau A
Westchester A C

**Game & Interactive Design**
Alfred State A B

**Informatics**
Albany B

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**Information and Network Technology**
Monroe A

**Information Management**
Dutchess A

**Information Science**
Oswe B
NYS College of Agriculture & Life Sciences at Cornell University B

**Information Systems**
Stony Brook B

**Information Systems Security**
Erie C

**Information Technology**
Adirondack A C
Canton B
Cayuga A
Cobleskill B
Corning A
Erie (South) A
Jamesstown A C
Monroe A
Nassau A C
Plattsburgh B
Suffolk A C

**Information Technology and Management**
University at Buffalo B

**Information Technology: Applications Software Development**
Alfred State B
Morrisville State B

**Information Technology: Computer Networking**
Adirondack A

**Information Technology: Cybersecurity**
Adirondack A

**Information Technology: End User Support**
Morrisville B

**Information Technology: Information Security**
Adirondack A

**Information Technology Management**
Delhi B

**Information Technology: Network Administration**
Alfred State B
Morrisville B

**Information Technology: Web Development**
Alfred State B
Morrisville B

**Management Information Systems**
Old Westbury B
Plattsburgh B

**Network Administration**
Jamestown C

**Network Administrator**
Ulster A C

**Network and Computer Security**
SUNY Poly B

**Networking**
Westchester A

**Networking & Cybersecurity**
Finger Lakes A

**Operations Management & Information Systems**
Oswe B

**Robotics**
Plattsburgh B

**Technological Systems Management**
Stony Brook B

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Key:  B = Bachelor’s Degree  A = Associate Degree  C = Certificate

For more information about these academic programs, contact SUNY campuses on the web at www.suny.edu/contactcampuses.