Analyze Your Success

Mathematics

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 B
  - Applied Computer Applications
    - Finger Lakes C
    - Applied Mathematics
      - Buffalo State B
      - Farmingdale B
      - Fredonia B
      - Oswego B
      - SUNY Poly B
  - Applied Mathematics and Statistics
    - Stony Brook B
    - Computer Science & Applied Mathematics
      - Albany B
      - Liberal Arts & Sciences: Mathematics
        - Cayuga A
        - Dutchess A
        - Herkimer A
        - Nassau A
        - Suffolk A
      - Mathematical Economics
        - University at Buffalo B
        - Oswego B
      - Mathematics
        - Albany B
        - Binghamton B
        - Brockport B
        - Buffalo State B
        - University at Buffalo B
        - Cortland B
        - Fredonia B
        - Geneseo A
        - Monroe A
        - New Paltz B
        - Old Westbury B
        - Oneonta B
        - Oswego B
        - Plattsburgh B
        - Potsdam B
        - Stony Brook B
      - Mathematics / Computer Science
        - Purchase B
      - Statistics
        - Oneonta B

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.

- C++ Java Advanced Programming
  - Dutchess C
- Computer Information Systems: Web Design & WWW Programming
  - Hudson Valley A
- Computer Numerical Control Programming
  - Corning C
- Computer Programming
  - Westchester C
- Computer Programming & Information Systems
  - Farmingdale B
- Data Processing, Programming & Systems
  - Mohawk Valley C
- Game Programming and Design
  - Finger Lakes A

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. Specialists in these evolving careers apply their computer knowledge to a variety of fields and often use a team-approach to fix, develop and maintain computer systems.

- Commercial Art: Digital Technologies
  - Nassau A
- Computer Applications for the Office
  - Erie C
  - Sullivan C
- Computer Applications Specialist
  - Westchester C
- Computer Desktop Support Specialist
  - Schenectady C
- Computer Forensics
  - Onondaga A
  - Tompkins Cortland A
- Computer Gaming Machine Repair Technician
  - Erie C
- Computer Graphics & Design
  - Columbia-Greene C
  - North Country A
- Computer Graphics/Graphic Design
  - Sullivan A
- Computer Hardware/Software Design
  - Cayuga A
- Computer Repair
  - Geneseo C
- Computer Repair Technology
  - Erie A
  - Nassau A
- Computer Science: Cybersecurity
  - Mohawk Valley A

Key:  B = Bachelor's Degree  A = Associate Degree  C = 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

### Computer & Information Science
Old Westbury B
SUNY Poly B

### Computer Information Science
Corning A

### Computer Information Systems
Alfred State A
Brockport A
Broome A
Buffalo State B
Canton A
Cayuga A, C
Clinton A
Cobleskill A
Columbia-Greene A, C
Corning A
Delhi A
Dutchess A
Erie A
Farmingdale C
Fredonia B
Fulton-Montgomery A
Geneseo A, C
Hudson Valley A
Jamestown A
Jefferson A
Monroe A
Morrisville A
Niagara A
Onondaga A
Rockland A
Schenectady A
Suffolk A
Sullivan A
SUNY Poly B
Tompkins Cortland A
Westchester A

### Computer Information Systems: Microcomputers
Mohawk Valley A
Nassau C

### Computer Information Systems: System & Network Administration
Hudson Valley A

### Computer Information Technology
Jefferson A

### Computer Information Technology: Networking
Orange A

### Computer Networking
Dutchess C
Fulton-Montgomery A

### Computer Networking Systems & Cyber Security
Schenectady C

### Computer Network Technician
Herkimer A

### Computer Repair and Networking
Schenectady C

### Computer Science
Adirondack A
Albany B
Alfred State A
Binghamton B
Brockport B
Broome A
University at Buffalo B
Canton A
Cayuga A
Columbia-Greene A
Corning A
Delhi A
Dutchess A
Erie A
Finger Lakes A
Fredonia B
Fulton-Montgomery A
Herkimer A
Hudson Valley A
Jamestown A
Jefferson A
Mankato State A
Morrisville A
Monroe A
Morrisville A
Nassau A
Niagara A
New Paltz B
Old Westbury B
Oneonta B
Onondaga A
Orange A
Oswego B
Plattsburgh B
Potsdam B
Schenectady A
Stony Brook B
Sullivan A
SUNY Poly B
Tompkins Cortland A
Ulster A

### Computer Science (SUNY Korea)
Stony Brook B

### Computer Systems & Network Technologies
Geneseo A

### Computer Systems Specialist
Fulton-Montgomery C

### Computer Systems Technology
Farmingdale C
Monroe A
Morrisville A

### Cyber Security
Alfred State B

### Informatics
Albany B

### Information and Network Technology
Monroe A

### Information Management
Dutchess A

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For more information about these academic programs, contact SUNY campuses on the web at [www.suny.edu/contactcampuses](http://www.suny.edu/contactcampuses)