

# Watson Computer Science

## Major Overview:

Computer science is a discipline that stresses the design, analysis, implementation, management and application of large software systems, as well as systems combining both hardware and software. In the Watson School, we offer a rich set of courses in software design, programming, hardware design and everything in between.

Students begin taking CS courses in their first semester at Binghamton and then can specialize in such areas as software systems, networking, operating systems, Web-based systems, graphics, robotics, microprocessor-based design and game design. Our flexibility in choosing courses also allows students to minor in such areas as the arts, business, math, music, languages or the sciences.

## Research Areas:

Watson students learn from and work with an outstanding and experienced faculty working in leading research areas. Students who participate in undergraduate research have the opportunity to delve into a focused area of interest, while gaining meaningful hands-on experience applying technical skills and putting their analytical and critical-thinking abilities to practice.

Research conducted in the Computer Science Department includes:

- Computer systems
- Operating systems, networking, and distributed systems
- Information systems
- Graphics, image processing, vision
- Security

Watson School students are encouraged to speak with their individual department when seeking out opportunities in research.

Explore more [research opportunities in the Computer Science Department](http://www.binghamton.edu/cs/research/).

[<http://www.binghamton.edu/cs/research/>]

For more information about [research in the Watson School](http://binghamton.edu/watson/research), please visit the link.  
[<http://binghamton.edu/watson/research>]

### Post-Graduation:

Computer science majors will gain experience with the design, analysis, implementation, management and application of large software systems, as well as combine both hardware and software. The flexibility of the program allows students to minor in areas like business, math, music, language, etc.

Computer science students can also choose to pursue advanced degrees focusing in computer architecture, computer networks, grid computing, image processing and many more fields. Obtaining a degree in computer science gives students the complex problem-solving skills and experience needed to be successful in any field.

### [Computer science helpful links](http://binghamton.edu/cs/)

[<http://binghamton.edu/cs/>]

### [Computer engineering helpful link](http://www.binghamton.edu/ece/)

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### Courses:

First-year courses to consider:

MATH 224/225 Calculus I Topics

MATH 226/227 Calculus II Topics

CS 101 Professional Skills, Ethics and CS Trends

CS 110 Programming Concepts and Applications

CS 120 Computer Systems I: Machine Organization

CS 140 Programming with Objects

WRIT 111 Coming to Voice

Click here to access the [University Bulletin](http://bulletin.binghamton.edu/) for an in- depth description of each course.  
[<http://bulletin.binghamton.edu/>]

Thank you.

For more information contact Watson School Advising:

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