Why study computer science at Benedictine?
You can develop a strong foundation in computer science coupled with an understanding of its application to mathematics, science or business through a core of required courses. You will also choose electives that allow you to concentrate on the basic study of the theory and applications of computers, scientific and technical applications, or applications for the business programmer or systems analyst. A team-oriented, software engineering project caps off your program.

You will build a solid foundation in problem-solving, algorithm development, data structures, programming and computer organization, as well as strong oral and written communication skills vital to your career. In addition to the University’s general education requirements, which develop the liberal education of all students, you will complete at least 44 semester credit hours in computer science, two semesters of computational courses and one semester of discrete mathematics.

What careers are available with a degree in Computer Science?
Your knowledge of computer technology and its applications will make a career in government, business, industry and education available. Application software development, software engineer, systems software development, network administration, database management and consulting are just a few of your possible employment opportunities. Benedictine Computer Science graduates have a proven record of success. Many of our graduates select to pursue a master’s degree in computer science.

How do you gain experience in computer science?
You can acquire valuable experiences off campus through part-time jobs and internships at local companies. Elective courses can be used to complete a minor or second major in accounting, business or one of the social sciences. Courses in accounting and managerial finance are also recommended to add to your business knowledge.

Elective offerings in Computer Science
- Operating Systems
- Advanced Web Application Development
- Selected Topics
- Algorithm Design and Analysis
- Artificial Intelligence
- Theory of Programming Languages
- Formal Languages and Automata
- Computer Networks and Data Communications
- Operating Systems Practicum
- Database Management Systems Practicum
- Computer Networks Practicum
- Programming Languages Practicum
- Numerical Analysis Practicum

You may choose a minor in Computer Science by taking a minimum of 21 semester credit hours.
Sample Program
Bachelor of Science in Computer Science

Below is a sample four-year plan that an incoming freshman student would follow. There may be slight variations to course offerings. Transfer students who have completed an Associate of Arts degree or an Associate of Science degree may have many of the core electives listed in this plan satisfied through transfer coursework.

### FRESHMAN
- Introduction to Computing: 2
- Python Programming Lab: 2
- Writing Colloquium: 3
- Computational course: 3
- Historical (QHT) course: 3
- Theology of Love: 3
- Computer Programming: 4
- Computational course: 3
- Research Writing: 3
- Basic Speech: 3
- Theology of Justice: 3
- Total Credits: 16

### SOPHOMORE
- Data Structures and Algorithms I: 3
- Introduction to Computer Systems: 3
- Discrete Mathematics: 4
- Social Scientific II: Political, Global and Economic Systems (QPE) course: 3
- Catholic and Benedictine Intellectual Traditions (IDS 201): 3
- Web-based Applications Development: 2
- Data Structures and Algorithms II: 3
- Object-Oriented Design and Programming: 2
- Philosophical (QPL) course: 3
- Physical Scientific (QPS) course: 3
- Technical Communications: 3
- Total Credits: 16

### JUNIOR
- Computer Science elective: 3
- Religions/Theological (QRT) course: 3
- Artistic and Creative (QCA) course: 3
- Electives: 6
- Total Credits: 15

### SENIOR
- Software Engineering: 3
- Computer Science elective: 3
- Social Scientific I: Individuals, Organizations and Societies (QIO) course: 3
- Electives: 6
- Total Credits: 15

- Capstone Project: 3
- Life Scientific (QLS) course: 3
- Electives: 9
- Total Credits: 15