



Computer Information Systems

at Benedictine University

Why study computer information systems at Benedictine?

By studying Computer Information Systems at Benedictine University, you will acquire a solid foundation in information systems coupled with an understanding of and experience in its application to business, mathematics or science. You will also choose electives that allow you to concentrate on applications for the business programmer or systems analyst, or the theory and applications of computers. A team-oriented, software engineering project caps off your program.

Throughout the course of study, students will develop a solid foundation in problem-solving, algorithm development, data structures, programming and computer organization, as well as in accounting, economics, finance, management and marketing. A balance of technical and business skills is vital to a successful career. In addition to the University's general education requirements that develop the liberal education of all students, you will complete at least 32 semester credit hours in computer science, 15 semester credit hours in business courses and 10 semester credit hours in computational courses.

What technology resources are available?

The Department of Mathematical and Computational Sciences is part of the College of Science and is located in the Birck Hall of Science. The department maintains the Computer Research Laboratory dedicated exclusively for students in the major program. It provides a comfortable atmosphere in which to congregate and work on software and/or research projects. Software development is accomplished through Java, Python, and the Microsoft Visual Studio, which includes Visual C++, Visual C# and Visual Basic. The College of Science operates a multiprocessor Linux cluster which is used for research in all of the sciences. In addition, Benedictine University provides access to more than 200 personal computers across campus. These computers use the Microsoft Windows 7 operating system and run Microsoft Office as the standard productivity tool.

What careers are available with a degree in Computer Information Systems?

Your knowledge of information systems and its applications will make careers in information technology (IT) possible. High-growth industries include IT consulting, education, health care, computer sales, wholesale, retail, business services, financial services, insurance and real estate. Typical entry-level positions include systems analyst, business analyst, application programmer, information systems manager and Internet developer. Benedictine graduates have a proven record of success. Many of our graduates are selected by their employers to pursue a master's degree.

How do you gain experience in computer information systems?

You will have the opportunity to be involved in activities that complement your field of study. Projects, research and assisting in the computer laboratories can provide you with experience in information systems on campus. You can acquire valuable experiences off campus through part-time jobs and internships in organizations such as Navistar, Argonne National Laboratory and other local companies. Recent graduates have obtained their first job at their internship site.

Recommended Program

Bachelor of Science in Computer Information Systems

FRESHMAN

Introduction to Computing	2
Python Programming Lab	2
Accounting I	3
Writing Colloquium	3
Business Calculus	3
Philosophical (QPL) course	3
	16

Computer Programming	4
Research Writing	3
Social Scientific I: Individuals, Organizations and Societies (QIO) course	3
Accounting II	3
Life Scientific (QLS) course	3
	16

JUNIOR

Software Engineering	3
Managerial Finance, Management, Marketing or Data/Text Mining	3
Religions/Theological (QRT) course	3
Electives	6
	15

Database Management Systems	3
Project Management	3
Historical (QHT) course	3
Literary and Rhetorical (QLR) course	3
Human Dignity and the Common Good (IDS 301)	3
	15

SOPHOMORE

Introduction to Computer Systems	3
Data Structures and Algorithms I	3
Discrete Mathematics	4
Basic Speech	3
Catholic and Benedictine Intellectual Traditions (IDS 201)	3
	16

Object-Oriented Design and Programming	3
Web-based Applications Development	3
Principles of Macroeconomics or Microeconomics	3
Business Statistics I	3
Physical Scientific (QPS) course	3
	15

SENIOR

Computer Science elective	3
Artistic and Creative (QCA) course	3
Electives	9
	15

Capstone Project	3
Electives	12
	15

Elective offerings in Computer Information Systems:

- Advanced Web Application Development
- Computer Networks and Data Communications
- Computer Networks Practicum
- Database Management Systems Practicum
- Enterprise Architecture
- Information and File Storage Systems
- Mobile Commerce

- Selected Topics
- Technical Communications

You may choose a minor in Computer Information Systems by taking a minimum of 21 semester credit hours.