

COMPUTER INFORMATION SYSTEMS BACHELOR OF SCIENCE

Leading to a Bachelor of Science Degree in Computer Information Systems

The B.S. in Computer Information Systems (BSIS) links the worlds of business and computer science. It is the study of business organizations and the programming, databases, and networks that support them. Functioning at the intersection of business and technology, it offers an interdisciplinary education that neither discipline alone can provide. Courses span computer science, business management, math, science, humanities, and social sciences. Students may obtain concentrations in the following areas: Business, or Business Analytics, Cybersecurity Management, or Project Management. This program offers a solid background in the analysis, design, development, deployment, and administration of computer-based information systems within a business management context. Students will complement business skills with strong technical skills in databases, systems analysis and design, business processes, organizational behavior, networking and telecommunications, and project management, along with problem solving skills.

Program Educational Objectives

Graduates will be well prepared for the growing number of opportunities in CIS and information technology.

Student Outcomes

By the time of graduation, students will be able to:

- Support the delivery and management of information systems within a specific application environment
- Analyze a problem, and identify and define the computing requirements appropriate to its solution
- Demonstrate effective professional communication skills
- Function effectively on teams to accomplish a common goal
- Analyze the global impact of technology on individuals, organizations, and society
- Make judgments and draw appropriate conclusions based on quantitative analysis
- Apply ethical principles to professional activities and duties

Total credits for degree: 125-128

This is a four-year program starting in the fall semester of the student's first year and planned to end in the summer semester of the student's fourth year. Management or Computer Electives are chosen in consultation with the student's primary advisor.

Course	Title	Credits
Freshman Year		
Fall Semester		
MGMT1025	COMPUTER BUSINESS APPLICATIONS	4
MGMT1000	INTRODUCTION TO MANAGEMENT	4
MATH1000	COLLEGE MATHEMATICS	4

Course	Title	Credits
English Sequence		4
		Credits
		16
Spring Semester		
COMP1000	COMPUTER SCIENCE I	4
MGMT2000	MANAGEMENT INFORMATION SYSTEMS	4
MATH2800	FINITE MATH	4
English Sequence		4
		Credits
		16
Sophomore Year		
Fall Semester		
COMP1050	COMPUTER SCIENCE II	4
MGMT1500 or MATH1030	DECISION ANALYSIS FOR BUSINESS or STATISTICS & APPLICATIONS	4
MGMT2100	MANAGEMENT COMMUNICATIONS	4
COMP1100	INTRODUCTION TO NETWORKS	4
		Credits
		16
Spring Semester		
COMP2650	DATABASES	4
MGMT2525	SYSTEMS ANALYSIS, DESIGN, AND IMPLEMENTATION	4
MGMT2550	APPLIED PROJECT MANAGEMENT	4
HSS Elective		4
		Credits
		16
Summer Semester		
COOP3000	PRE CO-OP WORK TERM (OPTIONAL)	0
		Credits
		0
Junior Year		
Fall Semester		
COMP2500	SECURITY PRINCIPLES	4
MGMT2750	INTEGRATIVE FINANCIAL ACCOUNTING	4
MGMT3075	TECHNOLOGY ACQUISITION PROJECTS	4
Concentration Elective Course 1 or COMP/MGMT Elective		3-4
		Credits
		15-16
Spring Semester		
COOP3500	COOP EDUCATION 1	0
		Credits
		0
Summer Semester		
MGMT2850	PRINCIPLES OF MARKETING	4
Concentration Elective Course 2 or COMP/MGMT Elective		3-4
Science Elective Lab Science		4
HSS Elective		4
		Credits
		15-16
Senior Year		
Fall Semester		
COOP4500	COOP EDUCATION 2	0
		Credits
		0
Spring Semester		
MGMT4225	ENTREPRENEURIAL LEADERSHIP	4
Concentration Elective Course 3 or COMP/MGMT Elective		3-4
HSS Elective		4

Course	Title	Credits
HSS Elective		4
Credits		15-16
Summer Semester		
MGMT3100	E-COMMERCE	4
MGMT5510	CIS SENIOR PROJECT	4
COMP Elective		4
HSS Elective		4
Credits		16
Total Credits		125-128

ENGL/HSS Note

Students are required to complete:

- At least one course in Humanities: CSAS, HSSI, HIST, HUMN, LITR and PHIL
- At least one course in the Social Sciences; CSAS, HSSI, COMM, ECON, ENVM, POLS, PSYC, and SOCL
- The remaining course from either the Humanities or Social Sciences category.

Students with a three English course sequence may use the third English course to satisfy a Humanities requirement.

A minimum of 28 credits total, including English, humanities, and social science credit, is required to complete the humanities and social sciences graduation requirement.

Of the five listed humanities and social science electives, BSIS students must include the following **HSS Directed Electives**:

- ECON4102 PRINCIPLES OF ECONOMICS
- An Ethics elective

Business, Project Management, Cybersecurity Management or Business Analytics Concentrations (Optional)**Business Concentration Courses**

Complete the following courses:

Course	Title	Credits
MGMT3000	MANAGING & LEADING ORGANIZATIONS	4
MGMT3500	FINANCIAL MANAGEMENT	4
MGMT3650	BUSINESS LAW	4
Total Credits		12

Project Management Concentration Courses

Complete the following courses:

Course	Title	Credits
MGMT3160	PROJECT RISK	4
MGMT3165 or MGMT2650	INTRODUCTION TO LEAN SIX SIGMA CYBERSECURITY PLANS	4
MGMT3560	GROUP PROCESSES & TEAM BUILDING	4
Total Credits		12

Cybersecurity Management Concentration Courses

Complete the following courses:

Course	Title	Credits
MGMT2800	CYBERSECURITY MANAGEMENT	4
MGMT2560	CYBERSECURITY LAW & POLICY	3
MGMT2650	CYBERSECURITY PLANS	3
Total Credits		10

Business Analytics Concentration Courses

Complete the following courses:

Course	Title	Credits
COMP3125	DATA SCIENCE FUNDAMENTALS	4
PHIL4525	VIRTUAL ETHICS	4
MATH/MGMT/COMP Elective		4
Total Credits		12