COMPUTER INFORMATION SYSTEMS, BACHELOR OF SCIENCE

College: College of Science and Health
Department: Mathematical and Computational Sciences
Student Type: Traditional Undergraduate
Degree: Bachelor of Science
Campus: Lisle Campus

Progression in the Computer Information Systems Program

A student will progress in the Computer Information Systems program by completing the introductory sequence of CMSC 2200 Computer Programming and CMSC 2205 Data Structures and Algorithms I with a GPA of 2.500 or above and a grade of "C" or better in each of these courses. A transfer student must meet these requirements through equivalent transfer courses. Additionally, a transfer student must earn a GPA of 2.500 or above in all major classes (excluding labs) during the first semester at Benedictine in order to progress in the Computer Information Systems program.

If it is determined at any time that a student cannot progress in the Computer Information Systems program or graduate with a Computer Information Systems degree, the student will be required to change his or her major and seek academic advising outside of that program.

Requirements - Major

The Computer Information Systems major must complete a minimum of 30 semester credit hours of computer science courses numbered 2000 or above, including at least 18 semester credit hours at the 3000 level or above, and at least 9 semester credit hours at the 4000 level or above, 12 semester credit hours in business courses and 7 semester credit hours of computational courses. Required computer science courses are:

Code	Title	Hours
NTSC 1101	College of Science and Health Experience	1
Required Computer Science Courses		
CMSC 2200	Computer Programming	3
CMSC 2205	Data Structures and Algorithms I	3
CMSC 2220	Computer Architecture	3
CMSC 2365	Introduction to Computer Networks	3
CMSC 3301	Technical Communications	3
CMSC 3274	Object-Oriented Design and Programming	3
CMSC 3330	Database Management Systems	3
CMSC 4375	Software Engineering	3
CMSC 4398	Capstone Project	3
Computer science elective, 4000 level or higher		3
Required Business Courses		
ACCT 1111	Principles of Financial Accounting	3
ACCT 1112	Principles of Managerial Accounting	3
ECON 2001	Principles of Microeconomics [1]	3
or ECON 2002	Principles of Macroeconomics	
Select one of the following:		3
MGT 3300	Management	
BALT 3301	Managerial Decision Making Under Uncertainty	
BALT 3310	Visualization Techniques and Dashboarding	
BALT 4320	Data and Text Mining	
Required Computational Courses		
BALT 1150	Business Statistics I	3
MATH 2240	Discrete Mathematics	4
Select one of the following:		3
PHIL 2245	General Ethics	
PHIL 2246	Biomedical Ethics	
PHIL 2247	Business Ethics	
PHIL 2248	Environmental Ethics	
Total Hours		**53**

[1] ECON 2002 Principles of Macroeconomics recommended

- CMSC 3396 ACCA Seminar, CMSC 3397 Undergraduate Project, and CMSC 3399 Internship do not count toward major credit.
- Grades of "C" or better are required to apply computer science, business, or computational courses toward the degree.
- A student cannot major in both Computer Information Systems and Computer Science.
- In total, at least 18 hours of credit applied toward the major must be at the 3000-level or higher.

Objectives

Students in the Computer Science or Computer Information Systems program will achieve the following student learning outcomes (SLO):

Student Learning Outcome 1: Demonstrate a comprehensive understanding of the Java programming language.
• University SLO: 1. Disciplinary Competence and Skills; 5. Analytical Skills

Student Learning Outcome 2: Demonstrate a thorough understanding of unit testing.
• University SLO: 1. Disciplinary Competence and Skills; 5. Analytical Skills

Student Learning Outcome 3: Demonstrate a strong understanding of algorithms.
• University SLO: 1. Disciplinary Competence and Skills; 2. Critical and Creative Thinking Skills; 5. Analytical Skills

Student Learning Outcome 4: Develop oral and written communication skills.
• University SLO: 3. Communication Skills

Student Learning Outcome 5: Obtain practical experience with version control.
• University SLO: 1. Disciplinary Competence and Skills