Bachelor of Science with a Major in Computer Information Systems

Selected Educational Outcomes

1. Students will analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Students will design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Students will communicate effectively in a variety of professional contexts.
4. Students will recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Students will function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Students will apply computer science theory and software development fundamentals to produce computing-based solutions.

Examples of Outcome Assessments

The department assesses the extent to which the program requirements create the desired outcomes by a variety of techniques. Examples of these assessments include the following:

1. The capstone courses are used to assess student progress since taking Area F courses. They determine if students have mastered effective oral and written communication skills, acquired critical analysis skills, and learned to use the library and technological resources in solving non-routine problems. Assessment methods include student projects and presentations.
2. Student examinations and samples of student work are kept in the department and are examined by the faculty to assess student content knowledge.
3. Available student and alumni survey data collected by the University will be examined to determine student satisfaction with their undergraduate preparation for further education or employment.

Requirements for the Bachelor of Science Degree with a Major in Computer Information Systems

Code	Title	Hours
Core Curriculum		**60**
Core Curriculum Areas A-E (See VSU Core Curriculum)		42
Core Curriculum Area F [1]		18
CS 1301	Principles of Programming I	4
CS 1302	Principles of Programming II	4
CS 2620	Discrete Structures	3
ACCT 2101 & ACCT 2102	Principles of Accounting I and Principles of Accounting II	6
ECON 2106	Principles of Microeconomics (with 2 hours "spilling" into electives)	1
Senior College Curriculum		**60**
CS 3101	Computer Organization	3
Select one of the following:		3
CS 3300	UNIX Programming	
CS 3335	The C Programming Language	
CS 3340	Web Programming	
CS 3410	Data Structures	3
CS 4121	Data Communications and Networks I	3
CS 4321	Software Engineering I	3
CS 4345	Operating Systems	3
CS 4721	Database Design I	3
Three of any 3000-level or 4000-level course not required above (excluding CS 3000 and CS 3001)		9
Two of any CS 4000-level courses not required above		6
Supporting Courses		14
ECON 2106	Principles of Microeconomics ("spillover" from Area F)	

MATH 1401	Elementary Statistics	
MGNT 3250	Management and Organization Behavior	
MGNT 3300	Production and Operations Management	
FIN 3350	Financial Management	
or MKTG 3050	Introduction to Marketing	
Electives		10
Total Hours Required for the Degree		**120**

Requirements for the Bachelor of Science Degree with a Major in Computer Information Systems--Cyber Security Track

Code	Title	Hours
Core Curriculum		**60**
Core Curriculum Areas A-E (see VSU Core Curriculum)		42
Core Curriculum Area F		18
CS 1301	Principles of Programming I	4
CS 1302	Principles of Programming II	4
CS 2620	Discrete Structures	3
ACCT 2101 & ACCT 2102	Principles of Accounting I and Principles of Accounting II	6
ECON 2106	Principles of Microeconomics (with 2 hours "spilling" into electives)	1
Senior College Curriculum		**60**
CS 3101	Computer Organization	3
CS 3200	Security and Ethics in Computing	3
CS 3300	UNIX Programming	3
CS 3410	Data Structures	3
CS 3750	Introduction to Cybersecurity	3
CS 4121	Data Communications and Networks I	3
CS 4321	Software Engineering I	3
CS 4345	Operating Systems	3
CS 4625	Network and System Security	3
CS 4635	Digital Forensics	3
or CS 4884	Biometric Recognition	
CS 4721	Database Design I	3
One 3000- or 4000-level course not required above (excluding CS 3000 and CS 3001)		3
Supporting Courses		14
ECON 2106	Principles of Microeconomics ("spillover" from Area F)	2
MATH 1401	Elementary Statistics	3
or MATH 3600	Probability and Statistics	
MGNT 3250	Management and Organization Behavior	3
MGNT 3300	Production and Operations Management	3
FIN 3350	Financial Management	3
or MKTG 3050	Introduction to Marketing	
Electives		10
Total Hours Required for the Degree		**120**

Additional Requirements

1. A grade of “C” or better must be earned in all Area F courses and core curriculum lower-level math courses, all courses required for the major, and all supporting courses.
2. Students may use CS 4800 only one time to fulfill the additional 3000-level or 4000-level courses in the Senior College Curriculum.