

## DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE

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The computer and information science department offers four undergraduate programs, a bachelor of science in information systems, a bachelor of science in computer science, a bachelor of science in information technology, and an associate of science in information technology.

The program in information systems prepares students for careers as application programmers/analysts in a business environment and for further graduate work in information systems. Business courses supplement a strong core of technical courses to enable students to design and implement business processing systems that require programming, databases, web development, networking, and client-server processing.

The program in computer science prepares students for careers as systems programmers in a scientific and/or engineering environment and for graduate work in computer science. Mathematics and engineering courses supplement a strong core of computer science courses, enabling students to design and implement software that requires complicated computations, data structures and interfaces.

The program in information technology prepares students for careers in administering and supporting the computing infrastructures of an organization. The curriculum consists of an integrated set of courses in networking, web development and administration, database development and administration, systems administration, and computer forensics.

### Curriculum in Information Systems

Degree Completion Plan Beginning in Fall Semester							
Freshman				Sophomore			
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
ENGL 1013 <sup>1, T</sup>	3	ENGL 1023 <sup>1, T</sup>	3	ENGL 2053 <sup>T</sup>	3	BUAD 2053 <sup>T</sup>	3
COMS 1403 <sup>T</sup>	3	COMS 2104 <sup>T</sup>	4	COMS 2203 <sup>T</sup>	3	COMS 2213 <sup>T</sup>	3
COMS 1411 <sup>T</sup>	1	COMS 2003 <sup>T</sup>	3	COMS 2703 <sup>T</sup>	3	COMS 2853 <sup>T</sup>	3
MATH 2243 <sup>T</sup>	3	Science with Lab <sup>1, T</sup>	4	COMS 2700 <sup>T</sup>	0	ACCT 2013 <sup>T</sup>	3
Social Sciences <sup>1, T</sup>	6	ECON 2003 <sup>T</sup>	3	ACCT 2003 <sup>T</sup>	3	ECON 2013 <sup>T</sup>	3
				Physical Activity <sup>1, T</sup>	1	Physical Activity <sup>1, T</sup>	1
				COMS 2903 <sup>T</sup>	3		
<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>17</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>
Junior				Senior			
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
SPH 2173 <sup>T</sup>	3	MGMT 3003	3	Humanities <sup>1, T</sup>	3	Fine Arts <sup>1, T</sup>	3
COMS 4203	3	Science with Lab <sup>1, T</sup>	4	COMS 4033	3	COMS 4043	3
COMS 3903	3	COMS 4703	3	COMS 4133	3	COMS 4053	3
COMS 3513	3	COMS 4700	3	COMS 4303	3	COMS Elective <sup>2</sup>	3
Social Sciences <sup>1, T</sup>	3	COMS 3503	3	COMS 3053	3	Elective 3000-4000 level	3
		MKT 3043	0				
<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>15</b>

### Curriculum in Information Systems

#### Degree Completion Plan Beginning in Spring Semester

Freshman		Sophomore					
Spring	Fall	Spring	Fall	Spring	Fall		
ENGL 1013 <sup>1</sup>	3	ENGL 1023 <sup>1, T</sup>	3	COMS 2003 <sup> T</sup>	3	BUAD 2053 <sup> T</sup>	3
COMS 2104 <sup> T</sup>	4	COMS 2203 <sup> T</sup>	3	COMS 2213 <sup> T</sup>	3	ACCT 2013 <sup> T</sup>	3
COMS 1403 <sup> T</sup>	3	COMS 2703 <sup> T</sup>	3	COMS 2853 <sup> T</sup>	3	COMS 3903 <sup> T</sup>	3
COMS 1411 <sup> T</sup>	1	COMS 2700 <sup> T</sup>	0	ACCT 2003 <sup> T</sup>	3	ENGL 2053 <sup> T</sup>	3
MATH 2243 <sup> T</sup>	3	ECON 2003 <sup> T</sup>	3	ECON 2013 <sup> T</sup>	3	Social Sciences <sup>1, T</sup>	3
Social Sciences <sup>1, T</sup>	3	COMS 2903 <sup> T</sup>	3			Physical Activity <sup>1, T</sup>	1
		Physical Activity <sup>1, T</sup>	1				
<b>Total Hours</b>	<b>17</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>
Junior		Senior					
Spring	Fall	Spring	Fall	Spring	Fall		
Social Sciences <sup>1, T</sup>	3	MGMT 3003	3	COMS 4043	3	COMS 4303	3
SPH 2173 <sup> T</sup>	3	COMS 4033	3	Science with Lab <sup>1, T</sup>	3	COMS 3053	3
COMS 3503	3	Science with Lab <sup>1, T</sup>	4	MKT 3043	3	COMS Elective <sup>2</sup>	3
COMS 4203	4	COMS 4133	3	Elective 3000-4000 level	3	COMS 4053	3
COMS 4703	3	COMS 3513	3	Humanities <sup>1, T</sup>	3	Fine Arts <sup>1, T</sup>	3
COMS 4700	0						
<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>

<sup>1</sup>See appropriate alternatives or substitutions in "General Education Requirements" on page 88.

<sup>2</sup>1000-level courses may not be used to satisfy this requirement.

<sup>T</sup> Designates a block of courses that would provide for a seamless transfer into this program if equivalent courses are taken at another college or university

### Curriculum in Computer Science

#### Degree Completion Plan Beginning in Fall Semester

Freshman		Sophomore					
Fall	Spring	Fall	Spring	Fall	Spring		
ENGL 1013 <sup>1, T</sup>	3	ENGL 1023 <sup>1, T</sup>	3	COMS 2203 <sup> T</sup>	3	SPH 2173 <sup> T</sup>	3
COMS 1403 <sup> T</sup>	3	COMS 2104 <sup> T</sup>	4	COMS 2703 <sup> T</sup>	3	COMS 2213 <sup> T</sup>	3
COMS 1411 <sup> T</sup>	1	COMS 2003 <sup> T</sup>	3	COMS 2700 <sup> T</sup>	0	COMS 2223 <sup> T</sup>	3
Fine Arts <sup> T</sup>	3	Biological Science <sup>1, T</sup>	4	COMS 2903 <sup> T</sup>	3	ENGL 2053 <sup> T</sup>	3
Social Sciences <sup>1, T</sup>	6	Physical Activity <sup>1, T</sup>	1	ELEG 2134 <sup> T</sup>	4	MATH 2924 <sup> T</sup>	4
				ELEG 2130 <sup> T</sup>	0		
				MATH 2914 <sup> T</sup>	4		
<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>17</b>	<b>Total Hours</b>	<b>16</b>
Junior		Senior					
Fall	Spring	Fall	Spring	Fall	Spring		
COMS 3213	3	COMS 3703	3	Social Sciences <sup>1, T</sup>	3	Management Elective <sup>4</sup>	3
COMS 4203	3	COMS 4163	3	COMS 4033	3	COMS 4043	3
MATH 3153	3	COMS 4703	3	COMS 4103	3	COMS 4403	3
Social Sciences <sup>1, T</sup>	3	COMS 4700	0	COMS 3053	3	Technical Elective <sup>2</sup>	3
Science Sequence I <sup>3, T</sup>	4	Humanities <sup>1, T</sup>	3	MATH 4003	3	Elective 3000-4000 level	3
		Science Sequence II <sup>3, T</sup>	4	Physical Activity <sup>1, T</sup>	1		
<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>

## Curriculum in Computer Science

### Degree Completion Plan Beginning in Spring Semester

Freshman		Sophomore					
Spring	Fall	Spring	Spring	Fall	Fall		
ENGL 1013 <sup>1, T</sup>	3	ENGL 1023 <sup>1, T</sup>	3	ENGL 2053 <sup>T</sup>	3	SPH 2173 <sup>T</sup>	3
COMS 2104 <sup>T</sup>	4	COMS 2203 <sup>T</sup>	3	COMS 2213 <sup>T</sup>	3	COMS 4203	3
COMS 1403 <sup>T</sup>	3	COMS 2703 <sup>T</sup>	3	COMS 2223 <sup>T</sup>	3	Fine Arts <sup>1, T</sup>	3
COMS 1411 <sup>T</sup>	1	COMS 2700 <sup>T</sup>	0	COMS 2003 <sup>T</sup>	3	COMS 3213	3
Biological Science <sup>1, T</sup>	4	ELEG 2134 <sup>T</sup>	4	MATH 2914	4	MATH 2924 <sup>T</sup>	4
		ELEG 2130 <sup>T</sup>	0				
		COMS 2903 <sup>T</sup>	3				
<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>
Junior		Senior					
Spring	Fall	Spring	Spring	Fall	Fall		
COMS 3703	3	Social Sciences <sup>T</sup>	3	Management Elective <sup>4</sup>	3	COMS 3053	3
COMS 4163	3	COMS 4033	3	COMS 4043	3	Elective 3000-4000 level	3
COMS 4703	3	COMS 4103	3	COMS 4403	3	Social Sciences <sup>1, T</sup>	3
COMS 4700	0	MATH 4003	3	Technical Elective <sup>2</sup>	3	MATH 3153	3
Social Sciences <sup>1, T</sup>	6	Science Sequence I <sup>3, T</sup>	4	Science Sequence II <sup>3, T</sup>	4	Humanities <sup>1, T</sup>	3
Physical Activity <sup>1, T</sup>	1					Physical Activity <sup>1, T</sup>	1
<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>

<sup>1</sup>See appropriate alternatives or substitutions in "General Education Requirements" on page 88.  
<sup>2</sup>Technical electives must be taken from upper-level courses in Engineering, Physics, Chemistry, Math, or Astronomy.  
<sup>3</sup>May be satisfied by any 1-year science sequence that requires a lab in each course, excluding biological science courses.  
<sup>4</sup>This management elective is to be selected from COMS 4053, COMS 4063, or MGMT course approved jointly by the Department of Management and Marketing and the Department of Computer and Information Science.  
<sup>T</sup>Designates a block of courses that would provide for a seamless transfer into this program if equivalent courses are taken at another college or university

## Curriculum in Information Technology

### Degree Completion Plan Beginning in Fall Semester

Freshman		Sophomore					
Fall	Spring	Fall	Fall	Spring	Spring		
COMS 1403 <sup>T</sup>	3	COMS 1333 <sup>T</sup>	3	COMS 2203 <sup>T</sup>	3	COMS 2003 <sup>T</sup>	3
COMS 1411 <sup>T</sup>	1	COMS 2104 <sup>T</sup>	4	COMS 2333 <sup>T</sup>	3	COMS 2713 <sup>T</sup>	3
MATH 2243 <sup>T</sup>	3	Science with Lab <sup>2, T</sup>	4	COMS 2703 <sup>T</sup>	3	COMS 2733 <sup>T</sup>	3
Social Sciences <sup>2, T</sup>	6	ECON 2003 <sup>T</sup>	3	COMS 2700 <sup>T</sup>	0	BUAD 2053 <sup>T</sup>	3
ENGL 1013 <sup>2, T</sup>	3	ENGL 1023 <sup>2, T</sup>	3	ENGL 2053 <sup>T</sup>	3	Elective <sup>T</sup>	3
				COMS 2903 <sup>T</sup>	3	Physical Activity <sup>2, T</sup>	1
<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>17</b>	<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>
Junior		Senior					
Fall	Spring	Fall	Fall	Spring	Spring		
COMS 3903	3	COMS (3000-4000) <sup>1</sup> Elective	3	COMS (3000-4000) <sup>1</sup> Elective	3	COMS 3053	3
COMS 4203	3	COMS 3523	3	COMS 4033	3	COMS 4043	3
COMS 4313	3	COMS 4703	3	COMS 4213	3	COMS 4063	3
SPH 2173 <sup>T</sup>	3	COMS 4700	0	COMS 4713	3	Elective (3000-4000) <sup>1, 2</sup>	3
Humanities <sup>3, T</sup>	3	Science with Lab <sup>2, T</sup>	4	COMS 4710	0	Physical Activity <sup>2, T</sup>	1
		Elective (3000-4000 level) <sup>1</sup>	3	Social Sciences <sup>2, T</sup>	3	Fine Arts <sup>2, T</sup>	3
<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>

### Curriculum in Information Technology

#### Degree Completion Plan Beginning in Spring Semester

Freshman				Sophomore			
Spring	Fall		Spring	Fall			
COMS 1403 <sup>T</sup>	3	COMS 2003 <sup>T</sup>	3	COMS1333 <sup>T</sup>	3	COMS 2333 <sup>T</sup>	3
COMS 1411 <sup>T</sup>	1	COMS 2104 <sup>T</sup>	4	COMS 2203 <sup>T</sup>	3	COMS 2903 <sup>T</sup>	3
MATH 2243 <sup>T</sup>	3	COMS 2703 <sup>T</sup>	3	COMS 2713 <sup>T</sup>	3	ENGL 2053 <sup>T</sup>	3
Social Sciences <sup>2,T</sup>	3	COMS 2700 <sup>T</sup>	0	COMS 2733 <sup>T</sup>	3	BUAD 2053 <sup>T</sup>	3
Science with Lab <sup>2,T</sup>	4	Social Sciences <sup>2,T</sup>	3	SPH 2173 <sup>T</sup>	3	Science with Lab <sup>2,T</sup>	4
ENGL 1013 <sup>2,T</sup>	3	ENGL 1023 <sup>2,T</sup>	3				
<b>Total Hours</b>	<b>17</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>
Junior				Senior			
Spring	Fall		Spring	Fall			
COMS 3523	3	COMS 3903	3	COMS (3000-4000) <sup>1</sup> Elective	3	COMS (3000-4000) <sup>1</sup> Elective	3
COMS 4063	3	COMS 4033	3	COMS 3053	3	COMS 4213	3
COMS 4703	0	COMS 4203	3	COMS 4043	3	COMS 4313	3
COMS 4700	3	COMS 4713	3	Elective (3000-4000) <sup>1</sup>	3	Humanities <sup>2,T</sup>	3
ECON 2003 <sup>T</sup>	3	COMS 4710	0	Fine Arts <sup>2,T</sup>	3	Elective (3000-4000) <sup>1</sup>	3
Elective <sup>T</sup>	3	Social Sciences <sup>2,T</sup>	3			Physical Activity <sup>T</sup>	1
		Physical Activity <sup>2,T</sup>	1				
<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>

<sup>1</sup>One elective must be in the area of networking.

<sup>2</sup>See appropriate alternatives or substitutions in "General Education Requirements" on page 88.

<sup>T</sup> Designates a block of courses that would provide for a seamless transfer into this program if equivalent courses are taken at another college or university

The Associate of Science in Information Technology program enables students to develop skills in the areas of web processing, databases, networking, programming, and various operating systems. These skills enable students to seek positions within the information technology industry.

Associate of Science  
in Information  
Technology

#### Curriculum in Information Technology Associate of Science Degree Suggested Sequence of Courses

Freshman				Sophomore			
Fall		Spring		Fall		Spring	
COMS 1403 <sup>T</sup>	3	COMS 1333 <sup>T</sup>	3	COMS 2203 <sup>T</sup>	3	SPH 2173 <sup>T</sup>	3
COMS 1411 <sup>T</sup>	1	COMS 2104 <sup>T</sup>	4	COMS 2703 <sup>T</sup>	3	COMS Elective <sup>3,T</sup>	9
COMS 2003 <sup>T</sup>	3	COMS 2233 <sup>T</sup>	3	COMS 2700 <sup>T</sup>	0	General Elective <sup>T</sup>	3
MATH 1113 <sup>2,T</sup>	3	ENGL 1023 <sup>1,T</sup>	3	COMS Elective <sup>3,T</sup>	3		
ENGL 1013 <sup>1,T</sup>	3	Social Sciences <sup>1,T</sup>	3	PHSC 1013 <sup>T</sup>	3		
Social Sciences <sup>1,T</sup>	3			PHSC 1021 <sup>T</sup>	1		
				ENGL 2053 <sup>T</sup>	3		
<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>15</b>

<sup>1</sup>See appropriate alternatives or substitutions in "General Education Requirements" on page 88.

<sup>2</sup>The mathematics requirement may be fulfilled by taking MATH 1113 or any higher level mathematics course.

<sup>3</sup>1000-level courses may not be used to satisfy this requirement.

<sup>T</sup> Designates a block of courses that would provide for a seamless transfer into this program if equivalent courses are taken at another college or university