

# 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. Each program enables the student to study computing in a setting that uses a variety of state-of-the-art computer equipment and 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 heterogeneous computer systems and networks. 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			
ENGL 1013 <sup>1</sup>	3	ENGL 1023 <sup>1</sup>	3	ENGL 2053	3	BUAD 2053	3
COMS 1403	3	COMS 2104	4	COMS 2203	3	COMS 2213	3
COMS 1411	1	COMS 2003	3	COMS 2703	3	COMS 2853	3
MATH 2243	3	Science with Lab <sup>1</sup>	4	ACCT 2003	3	ACCT 2013	3
Social Sciences <sup>1</sup>	6	ECON 2003	3	Physical Activity <sup>1</sup>	1	ECON 2013	3
				COMS 2903	3	Physical Activity <sup>1</sup>	1
				COMS 2700	0		
<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			
SPH 2173	3	MGMT 3003	3	Humanities <sup>1</sup>	3	Fine Arts <sup>1</sup>	3
COMS 4203	3	Science with Lab <sup>1</sup>	4	COMS 4033	3	COMS 4043	3
COMS 3903	3	COMS 4703	3	COMS 4133	3	COMS 4053	3
COMS 3513	3	COMS 3503	3	COMS 4303	3	COMS Elective <sup>2</sup>	3
Social Sciences <sup>1</sup>	3	MKT 3043	3	Elective 3000-4000 level	3	Elective 3000-4000 level	3
		COMS 4700	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</sup>	3 COMS 2003	3 BUAD 2053	3 COMS 2104	3 ACCT 2013
COMS 1403	3 COMS 2703	3 COMS 2853	3 COMS 3903	COMS 1411	3 ENGL 2053
MATH 2243	3 COMS 2903	3 ECON 2013	3 Social Sciences <sup>1</sup>	Social Sciences <sup>1</sup>	3 Physical Activity <sup>1</sup>
Social Sciences <sup>1</sup>	3 Physical Activity <sup>1</sup>	1	Physical Activity <sup>1</sup>	COMS 2700	0
<b>Total Hours</b>	<b>17 Total Hours</b>	<b>16 Total Hours</b>	<b>15 Total Hours</b>	<b>16 Total Hours</b>	<b>16 Total Hours</b>
Junior		Senior			
Spring	Fall	Spring	Fall	Spring	Fall
Social Sciences <sup>1</sup>	3 MGMT 3003	3 COMS 4043	3 COMS 4303	SPH 2173	3 Elective 3000-4000 level
COMS 3503	3 Science with Lab <sup>1</sup>	4 MKT 3043	3 COMS Elective <sup>2</sup>	COMS 4203	3 COMS 4053
COMS 4703	3 COMS 3513	3 Humanities <sup>1</sup>	3 Fine Arts <sup>1</sup>	COMS 4700	0
<b>Total Hours</b>	<b>15 Total Hours</b>	<b>16 Total Hours</b>	<b>16 Total Hours</b>	<b>16 Total Hours</b>	<b>15 Total Hours</b>

<sup>1</sup>See appropriate alternatives or substitutions in "General Education Requirements" on page 83.

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

## Curriculum in Computer Science

### Degree Completion Plan Beginning in Fall Semester

Freshman		Sophomore			
Fall	Spring	Fall	Spring	Fall	Spring
ENGL 1013 <sup>1</sup>	3 ENGL 1023 <sup>1</sup>	3 ENGL 2053	3 SPH 2173	COMS 1403	3 COMS 2213
COMS 1411	1 COMS 2003	3 COMS 2703	3 COMS 2223	COMS 1411	3 COMS 2223
BUAD 1003	3 Biological Science <sup>1</sup>	4 COMS 2903	3 ELEG 2134	Social Sciences <sup>1</sup>	6 Physical Activity <sup>1</sup>
Social Sciences <sup>1</sup>	6 Physical Activity <sup>1</sup>	1 COMS 2700	0 MATH 2924	MATH 2914	4 ELEG 2130
<b>Total Hours</b>	<b>16 Total Hours</b>	<b>15 Total Hours</b>	<b>16 Total Hours</b>	<b>16 Total Hours</b>	<b>17 Total Hours</b>
Junior		Senior			
Fall	Spring	Fall	Spring	Fall	Spring
COMS 3213	3 COMS 3703	3 Social Sciences <sup>1</sup>	3 Fine Arts <sup>1</sup>	COMS 4203	3 COMS 4043
MATH 3153	3 COMS 4703	3 COMS 4103	3 COMS 4403	Social Sciences <sup>1</sup>	3 Humanities <sup>1</sup>
Science Sequence I <sup>3</sup>	4 Science Sequence II <sup>3</sup>	4 MATH 4003	3 Elective 3000-4000 level	COMS 4700	0 Physical Activity <sup>1</sup>
<b>Total Hours</b>	<b>16 Total Hours</b>	<b>16 Total Hours</b>	<b>16 Total Hours</b>	<b>16 Total Hours</b>	<b>15 Total Hours</b>

## Curriculum in Computer Science

### 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</sup>	3 ENGL 2053	3 SPH 2173	3	3
COMS 2104	4 COMS 2203	3 COMS 2213	3 COMS 4203	3	3
COMS 1403	3 COMS 2703	3 COMS 2223	3 Fine Arts <sup>1</sup>	3	3
COMS 1411	1 ELEG 2134	4 COMS 2003	3 COMS 3213	3	3
Biological Science <sup>1</sup>	4 ELEG 2130	0 MATH 2914	4 MATH 2924	4	4
	COMS 2903	3			
	COMS 2700	0			
<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>16</b>
Junior		Senior			
Spring	Fall	Spring	Fall	Spring	Fall
COMS 3703	3 Social Sciences	3 Social Sciences	3 BUAD 1003	3	3
COMS 4163	3 COMS 4033	3 COMS 4043	3 Elective 3000-4000 level	3	3
COMS 4703	3 COMS 4103	3 COMS 4403	3 COMS (3000-4000) Elective	3	3
Social Sciences <sup>1</sup>	6 MATH 4003	3 Technical Elective <sup>2</sup>	3 MATH 3153	3	3
COMS 4700	0 Science Sequence <sup>3</sup>	4 Science Sequence II <sup>3</sup>	4 Humanities <sup>1</sup>	4	3
Physical Activity <sup>1</sup>	1		Physical Activity <sup>1</sup>	1	1
<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 83.  
<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.

## Curriculum in Information Technology

### Degree Completion Plan Beginning in Fall Semester

Freshman		Sophomore			
Fall	Spring	Fall	Spring	Fall	Spring
COMS 1403	3 COMS 1333	3 COMS 2203	3 COMS 2003	3	3
COMS 1411	1 COMS 2104	4 COMS 2333	3 COMS 2713	3	3
MATH 2243	3 Science with Lab <sup>1</sup>	4 COMS 2700	0 COMS 2733	3	3
Social Sciences <sup>1,3</sup>	6 Social Sciences <sup>1,3</sup>	3 COMS 2703	3 BUAD 2053	3	3
ENGL 1013 <sup>3</sup>	3 ENGL 1023 <sup>3</sup>	3 ENGL 2053	3 Elective	3	3
		COMS 2903	3 Physical Activity <sup>3</sup>	3	1
<b>Total Hours</b>	<b>16</b>	<b>Total Hours</b>	<b>17</b>	<b>Total Hours</b>	<b>16</b>
Junior		Senior			
Fall	Spring	Fall	Spring	Fall	Spring
COMS 3903	3 COMS (3000-4000) <sup>2</sup> Elective	3 COMS (3000-4000) <sup>2</sup> Elective	3 COMS 3053	3	3
COMS 4203	3 COMS 3523	3 COMS 4033	3 COMS 4043	3	3
COMS 4313	3 COMS 4700	0 COMS 4213	3 COMS 4063	3	3
SPH 2173	3 COMS 4703	3 COMS 4713	3 Elective (3000-4000) <sup>2,3</sup>	3	3
Humanities <sup>3</sup>	3 Science with Lab <sup>3</sup> Elective (3000-4000 level) <sup>2</sup>	4 Social Sciences <sup>1,3</sup>	3 Physical Activity <sup>3</sup>	3	1
		3	Fine Arts <sup>3</sup>	3	3
<b>Total Hours</b>	<b>15</b>	<b>Total Hours</b>	<b>16</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	3	COMS 2003	3	COMS1333	3	COMS 2333	3
COMS 1411	1	COMS 2104	4	COMS 2203	3	COMS 2903	3
MATH 2243	3	COMS 2700	0	COMS 2713	3	ENGL 2053	3
Social Sciences <sup>1,3</sup>	3	COMS 2703	3	COMS 2733	3	BUAD 2053	3
Science with Lab <sup>3</sup>	4	Social Sciences <sup>1,3</sup>	3	SPH 2173	3	Science with Lab <sup>3</sup>	4
ENGL 1013 <sup>3</sup>	3	ENGL 1023 <sup>3</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>2</sup> Elective	3	COMS (3000-4000) <sup>2</sup> Elective	3
COMS 4063	3	COMS 4033	3	COMS 3053	3	COMS 4213	3
COMS 4700	0	COMS 4203	3	COMS 4043	3	COMS 4313	3
COMS 4703	3	COMS 4713	3	Elective (3000-4000) <sup>2</sup>	3	Humanities <sup>3</sup>	3
Social Sciences <sup>1,3</sup>	3	Social Sciences <sup>1,3</sup>	3	Fine Arts <sup>3</sup>	3	Elective (3000-4000) <sup>2</sup>	3
Elective	3	Physical Activity <sup>3</sup>	1			Physical Activity	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>The following course is required: ECON 2003.

<sup>2</sup>One elective must be in the area of networking.

<sup>3</sup>See appropriate alternatives or substitutions in "General Education Requirements" on page 83.

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	3	COMS 1333	3	COMS 2203	3
COMS 1411	1	COMS 2104	4	COMS 2703	3
COMS 2003	3	COMS 2233	3	COMS Elective <sup>3</sup>	3
MATH 1113 <sup>2</sup>	3	ENGL 1023 <sup>1</sup>	3	PHSC 1013	3
ENGL 1013 <sup>1</sup>	3	Social Sciences <sup>1</sup>	3	PHSC 1021	1
Social Sciences <sup>1</sup>	3		ENGL 2053	3	
<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 83.

<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.