

## B.S. Degree Sample Program

### FRESHMAN YEAR

Fall		Spring	
CS 111 - Concepts of Computer Science	3	CS 150 - Introduction to Computing II	3
CS 140 - Introduction to Computing I	4	ENG 102 - English Composition II	3
ENG 101 - English Composition	3	IME 106 - Engineering Problem Solving	3
MATH 150 - Calculus I	5	MATH 152 - Calculus II	5
SPC 103 - Interpersonal Communication Skills	3	MATH 224 - Discrete Mathematics	3
<b>Total</b>	<b>18</b>	<b>Total</b>	<b>17</b>

### SOPHOMORE YEAR

Fall		Spring	
CS 240 - Introduction to Computing III	3	CS 312 - Intro to Computer Org & Architecture	3
CS 275 - Interaction Programming	3	ECE 282 - Digital Systems Design	4
Laboratory Science Sequence	5	Laboratory Science Sequence	5
Introductory Fine Arts & Humanities	3	Intro Fine Arts & Humanities OR Social Sciences	3
Introductory Social Sciences	3		
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>15</b>

### JUNIOR YEAR

Fall		Spring	
CS 321 - Human-Computer Interaction Design	3	CS 325 - Software Engineering	3
CS 340 - Algorithms and Data Structures	3	CS 314 - Operating Systems	3
MATH Elective	3	CS Elective I	3
Laboratory Science	5	STAT 380 - Statistics for Applications	3
		Distribution Fine Arts/Humanities	3
<b>Total</b>	<b>14</b>	<b>Total</b>	<b>15</b>

### SENIOR YEAR

Fall		Spring	
CS 330 - Programming Languages	3	CS 499 - Senior Project: Software Implementation	3
CS 425 - Senior Project: Software Design	3	CS Elective IV	3
CS Elective II	3	CS Elective V	3
CS Elective III	3	Distribution Social Sciences	3
Interdisciplinary Studies Course	3	International Issues & Culture	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>15</b>

## B.S. Degree Requirements

<b>Natural Science and Mathematics Courses</b>		<b>30-32</b>
<b>Math courses</b>	16-17	
MATH 150, 152, 224 and one of MATH 250, 305, 321, 423		
<b>Laboratory Science Sequence</b>	10	
Either PHYS 211a/PHYS 212a and PHYS 211b/PHYS 212b or CHEM 121a/CHEM 125a and CHEM 121b/CHEM 125b		
<b>Natural Sciences Electives</b>	4-5	
One additional course from BIOL 120, CHEM 121a/CHEM 125a, PHYS 211a/PHYS 212a or PHYS 302/PHYS 312		
<b>Computing Core</b>		<b>38</b>
CS 111, 140, 150, 240, 275, 312, 314, 321, 325, 330, 340 ECE 282		
<b>Computing Electives</b>		<b>15</b>
Five courses selected from CS 423, 434, 438, 447, 454, 456, 482, 490, 495 ECE 481, 482, 483 MATH 465		
<b>Senior Project</b>		<b>6</b>
CS 425, 499		
<b>General Education Introductory Courses</b>		<b>9</b>
1 Fine Arts & Humanities and 2 Social Sciences or vice-versa		
<b>General Education Distribution Courses</b>		<b>6</b>
1 Fine Arts & Humanities and 1 Social Sciences		
<b>Skills Courses</b>		<b>15</b>
ENG 101, 102	6	
PHIL 106 or MATH 106 or IME 106 or FL 106	3	
SPC 103 or 104 or 105	3	
STAT 380	3	
<b>Interdisciplinary Studies Course</b>		<b>3</b>
<b>International Issues &amp; Culture Course</b>		<b>3</b>
<b>Total hours</b>		<b>125-127</b>

## Course Offering Schedule

Fall	Spring	Summer
CS 111 - Concepts of CS	CS 111 - Concepts of CS	CS 111 - Concepts of CS
CS 140 - Intro to Computing I	CS 140 - Intro to Computing I	CS 140 - Intro to Computing I
CS 150 - Intro to Computing II	CS 150 - Intro to Computing II	CS 150 - Intro to Computing II
CS 240 - Intro to Computing III	CS 240 - Intro to Computing III	CS 240 - Intro to Computing III
CS 275 - Interaction Prog	CS 275 - Interaction Prog	CS 447 - Networks and Data Comm
CS 312 - Intro to Com Org & Arch	CS 312 - Intro to Com Org & Arc	CS 454 - Theory of Computation
CS 321 - Human-Comp Inter Design	CS 314 - Operating Systems	CS 490 - Topics in CS
CS 325 - Software Engineering	CS 321 - Human-Comp Inter Design	ECE 282 - Digital Sys Design
CS 330 - Programming Languages	CS 325 - Software Engineering	ECE 381 - Microcontrollers
CS 340 - Algorithms & Data Struct	CS 330 - Programming Languages	ECE 483 - Computer Design
CS 414 - Operating Systems	CS 340 - Algorithms & Data Struct	
CS 425 - Senior Proj: S/W Design	CS 423 - Compiler Construction	
CS 434 - Database Mgmt Systems	CS 425 - Senior Proj: S/W Design	
CS 447 - Networks and Data Comm	CS 434 - Database Mgmt Systems	
CS 456 - Advanced Algorithms	CS 438 - Artificial Intelligence	
CS 482 - Computer Graphics	CS 447 - Networks and Data Comm	
CS 490 - Topics in CS	CS 456 - Advanced Algorithms	
CS 499 - Senior Proj: S/W Impl	CS 490 - Topics in CS	
ECE 282 - Digital Sys Design	CS 499 - Senior Proj: S/W Impl	
ECE 381 - Microcontrollers	ECE 282 - Digital Sys Design	
ECE 483 - Computer Design	ECE 381 - Microcontrollers	
MATH 465 - Numerical Analysis	ECE 482 - Microprocessor Systems	
	ECE 483 - Computer Design	

## Application for Major

To apply for a major in Computer Science, it is necessary to have:

1. Good standing.
2. Completion of Academic Development courses required by the University.
3. Completion of required courses to address high school deficiencies.
4. Completion of MATH 120 college algebra with a grade of C or higher.
5. A cumulative GPA of at least 2.0 (on a 4.0 scale).