

**Computer Science: Software Systems, B.S. (with Minor)**

Please refer to the Undergraduate Catalog for further program requirements and course descriptions.

<b>First Year – 32-34 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
CPSC 1100: Fundamentals of Computer Science	4	CPSC 1110: <i>Data Structures and Program Design</i>	4
MATH 1830: <i>Calculus for Mgmt, Life &amp; Social Sciences</i> * or 1950: <i>Calculus w Analytic Geometry I</i> (Mathematics)	3-4	MATH 2100: <i>Introductory Stats</i> , ENCE 2220: <i>Probability &amp; Stats for Engr</i> , or MGT 2130: <i>Stats for Business</i> (Statistics)	3
ENGL 1010 or 1011 (Rhetoric and Writing I)	3-4	ENGL 1020 or HIST 2100 (Rhetoric and Writing II)	3
FAH: Historical Understanding	3	FAH: Literature	3
Behavioral and Social Science	3	FAH: Visual and Performing Arts	3
	16-18		16
<b>Second Year – 32 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
CPSC 2800: <i>Intro to Operating Systems</i>	3	CPSC 2100: <i>Software Design and Development</i>	3
MATH 2030: <i>Discrete Math for Comp. Science</i> or 3000: <i>Intro to Logic &amp; Proof</i>	3	MATH 2200: <i>Elementary Linear Algebra</i>	3
Natural Science with Lab Sequence	4	Natural Science with Lab Sequence	4
Minor Course	3	Minor Course	3
Behavioral and Social Science	3	Minor Course	3
	16		16
<b>Third Year – 29 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
CPEN 3700: <i>Digital Logic &amp; Intro to Comp. Hardware</i>	4	CPSC 3200: <i>Algorithm Analysis &amp; Advanced Data Structure</i>	3
Approved CPSC or Tech Elective (3000-4000 Level)**	3	Approved CPSC or Tech Elective (3000-4000 Level)**	3
CPSC 3610: <i>Ethical &amp; Social Issues in Computing</i> (FAH: Thought, Values and Beliefs)	3	Natural Science with Lab	4
Math or Stats Elective (above 1830/1950 or 2100)	3	Non-Western Culture	3
Minor Course (3000-4000 Level)	3		
	16		13
<b>Fourth Year – 25-29 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
CPSC 4900: <i>Software Engineering</i>	3	CPSC 4910r: <i>Senior Capstone</i> or 4995r: <i>Thesis</i>	3
CPEN 4700: <i>Computer Architecture</i>	3	CPSC 4100: <i>Survey of Programming Languages</i>	3
Approved CPSC or Tech Elective (3000-4000 Level)**	3	Minor Course (3000-4000 Level)	3
Minor Course (3000-4000 Level)	3	Natural Science	3
Elective	1-3	Elective	0-2
	13-15		12-14

\*Students taking MATH 1830 may need CPSC 1000 or MGT 1000 as a prerequisite for Math/Statistics Elective (MGT 2140).

\*\*If Business Administration Minor, then CPSC 1000, CPSC 3220 and CPSC 4270 are required.

<b>Completed:</b>			
<b>Graduation Requirements:</b>	<b>Hrs</b>	<b>Degree Requirements:</b>	<b>Hrs</b>
122 Total Hours		24-25 General Education Hours	
39 Upper Division (3000-4000) Hours		75-76 Program (Major) Hours	
30 Hours at UTC		18 Minor Hours	
60 Hours at 4-year Institution		1-5 Elective Hours	
		Foreign Language ( <i>Not Required</i> )	