# Computer Science Bachelor of Science Program Catalog year 2016-2017

## FRESHMAN YEAR

First Semester  Lab Science <sup>1</sup> MATH 1131Q – Calculus I CSE 1010 – Intro Computing for Engineers ENGR 1000 – Orientation to Engineering Area 2 (Social Sciences)	Credits  4  4  3  1  3 15	Second Semester Lab Science <sup>1</sup> Math 1132Q – Calculus II CSE 1729 – Intro to Principles of Programming ENGL 1010 or 1011 – Seminar in Writing	Credits  4  4  3  4  15
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## SOPHOMORE YEAR

First Semester  Lab Science <sup>1</sup> CSE 2500 – Intro to Discrete Systems CSE 2050 – Data Structures and Object-oriented Design MATH 2110Q – Multivariable Calculus or MATH 2410Q – Elem. Differential Equations Area 1 (Arts and Humanities)	Credits  4  3  4 or 3  4 or 3  17 or 16	Second Semester CSE 2304 – Computer Architecture CSE 3500 – Algorithms and Complexity CSE 3100 – Systems Programming Area 2 (Social Science) PHIL 1104 (Area 1) – Phil. and Soc Ethics	Credits  3 3 3 3 3 15
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### JUNIOR YEAR

First Semester	Credits	Second Semester	Credits
CSE xxxx - Concentration course 1 CSE Elective STAT 3025Q-Stat. Methods MATH 2210Q-Linear Algebra Elective	3	<ul> <li>CSE xxxx - Concentration course 2</li> <li>Area 4 Course (Diversity and Multiculturalism)</li> </ul>	3
	3		3
	3 CSE 3000 -Contemporary Issues in CSE 3 CSE Elective <sup>2</sup>	1	
		3	
	3	Elective Elective	3
	15		2
			3
			16

### SENIOR YEAR

First Semester CSE 4939W – CSE Design Project I CSE xxxx - Concentration course 3 Area 4 (Diversity and Multiculturalism) Elective Elective	Credits  3 3 3 3 3 — 3 — 15	Second Semester CSE 4940 – CSE Design Project II CSE xxxx - Concentration course 4 Elective Elective <sup>3</sup>	Credits  3 3 3 3 12 to 4 12 to 13
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Additionally the program must include one W course other than CSE 4939W, which may be used to satisfy other requirements or Free Electives.

A two-course sequence must be selected from one of the following sequences. CHEM 1127Q, 1128Q; CHEM 1147Q,1148Q; CHEM 1137Q, 1138Q; PHYS 1401Q, 1402Q; PHYS 1601Q, 1602Q; PHYS 1501Q, 1502Q. An additional course must be selected from the department not selected for the sequence or from BIOL 1107, BIOL 1108, BIOL 1110, or GEOL 1050.

<sup>&</sup>lt;sup>2</sup> If needed to get 15 CSE credits in concentration and CSE electives.

<sup>&</sup>lt;sup>3</sup> Sufficient to make 120 credits, with at least 43 credits in CSE courses. Revised 5/23/2013