# Computer Science Bachelor of Science Program Catalog year 2014-2015

### FRESHMAN YEAR

First Semester	Credits	Second Semester	Credits
Lab Science <sup>1</sup>	4	Lab Science <sup>1</sup>	4
MATH 1131Q - Calculus I	4	Math 1132Q - Calculus II	4
CSE 1729 - Intro to Principles of Programming or	3	CSE 1102 - Object Oriented Design	3
CSE 1010 - Intro Computing for Engineers		ENGL 1010 or 1011 - Seminar in Writing	4
ENGR 1000 - Orientation to Engineering	1		15
Area 2 (Social Sciences)	3		
,	15		

### SOPHOMORE YEAR

First Semester	Credits	Second Semester	Credits
Lab Science <sup>1</sup>	. 4	CSE 2304 - Computer Architecture	3
CSE 2500 - Intro to Discrete Systems	3	CSE 3500 - Algorithms and Complexity	3
CSE 2100 - Data Structures and Intro to Algorithms	3	CSE 2102 - Intro to Software Engineering	3
MATH 2110Q - Multivariable Calculus or	4 or 3	Area 2 (Social Science)	3
MATH 2410Q - Elem. Differential Equations		PHIL 1104 (Area 1) - Phil. and Soc Ethics	3
Area ! (Arts and Humanities)	3		15
	17 or 16	ā.	

## JUNIOR YEAR

First Semester	Credits	Second Semester	Credits
CSE 4300-Operating Systems	3	CSE 3502-Theory of Computation	3
CSE Professional Requirement <sup>2</sup>	3	CSE Professional Requirement <sup>3</sup>	3
STAT 3025O-Stat. Methods	3	Related Area Course II	3
Related Area Course <sup>3</sup> I	3	CSE 3000 -Contemporary Issues in CSE or	1 or 3
MATH 2210Q-Linear Aigebra	3	CSE 3002 -Social, Ethical and Prof. Issues in CSE	
	15	Area 4 Course (Diversity and Multiculturalism)	3
		i ii i	13 or 15

### SENIOR YEAR

First Semester	Credits	Second Semester	Credits
CSE 4939W - CSE Design Project I	3	CSE 4940 - CSE Design Project II	3
CSE 4102 - Programming Languages or	3	CSE Professional Requirement <sup>3</sup>	3
CSE 4100 - Programming Language Translation		Free Elective	3
Related Area Course III	3	Free Elective	3
Area 4 (Diversity and Multiculturalism) or Free Elective	3	Free Elective <sup>4</sup>	_1 to 4
Free Elective	3		13 to 16
	15	_	

Additionally the program must include one W course other than CSE 4939W, which may be used to satisfy other requirements or Free Electives.

Revised 5/23/2013

<sup>&</sup>lt;sup>1</sup> 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> The CS Professional Requirement Courses must be selected from the following courses: CSE 3300, CSE 3800, CSE 3802, CSE 4500, CSE 4701, CSE 4703, CSE 4705, CSE 4707, CSE 4709, any CSE graduate course, or CSE 4095's with prior approval.

The CSci degree requires at least 9 credits at the 2000 or higher level that relate to each other, e.g. in the same department. These may not be courses that fulfill other CSci degree requirements.

<sup>&</sup>lt;sup>4</sup> Sufficient to make 120 credits, with at least 45 credits in CSE courses.