

Computer Science (BSCS) Degree Requirement Check-list(Requirements effective Summer 2013)

Student Name (Last, First): _____
 First semester at UVa: _____

UVa email ID: _____
 Expected grad. sem: _____

Required Computing & Math Courses:**Grade:****Semester (e.g. F13):****Comments?**

CS 1110 Introduction to Computer Science			
CS 2110 Software Development Methods			
CS 2102 Discrete Mathematics			
CS 2150 Program & Data Representation			
CS/ECE 2330 Digital Logic Design			
CS 2190 CS Seminar			
CS 3102 Theory of Computation			
CS 3330 Computer Architecture			
CS 3240 Advanced SW Development Techniques			
CS 4414 Operating Systems			
CS 4102 Analysis of Algorithms			
Capstone course (circle one: CS 4971 or CS 4980)			
APMA 3100 Probability			
APMA 2130 / APMA 3080 / APMA 3120 (circle one)			
APMA 2130 / APMA 3080 / APMA 3120 (circle one)			

SEAS required courses

Course	Grade	Semester
APMA 1110		
APMA 2120		
CHEM 1610		
CHEM 1611		
ENGR 1620		
ENGR 1621		
PHYS 1425		
PHYS 1429		
PHYS 2415		
PHYS 2419		

Science elective

Course	Grade	Semester

HSS electives (5)

	Course	Grade	Semester
1)			
2)			
3)			
4)			
5)			

STS courses

Course	Grade	Semester
STS 1500		
STS 2xxx/3xxx		
STS 4500		
STS 4600		

Course: _____

CS Electives (5)

	Course	Grade	Semester
1)			
2)			
3)			
4)			
5)			

Unrestricted electives (5)

	Course	Grade	Semester
1)			
2)			
3)			
4)			
5)			

List minor or additional majors here: _____

Computer Science (BSCS) Suggested Schedule

(Requirements effective Summer 2013)

First Semester:

APMA 1110	Single Variable Calculus	4
CHEM 1610	Intro Chemistry for Engr	3
CHEM 1611	Intro Chem for Engr. Lab	1
ENGR 1620	Introduction to Engineering	3
ENGR 1621	Intro to Engineering Lab	1
STS 1500	Engr, & Tech. & Soc.	<u>3</u>
		15

Second Semester:

APMA 2120	Multivariate Calculus	4
PHYS 1425	Physics I	3
PHYS 1429	Physics I Lab	1
CS 1110	Intro. To Computer Sci.	3
	Science Elective ¹	3
	HSS or unrestricted ^{2,3} elective	<u>3</u>
		17

Third Semester:

APMA _____	APMA Elective or 3100 ⁴	3
CS 2110	Software Develop. Methods	3
CS 2102	Discrete Math	1
PHYS 2415	General Physics II	3
PHYS 2419	Gen. Physics II Lab	3
	HSS or unrestricted ^{2,3} elective	<u>3</u>
		16

Fourth Semester:

CS 2150	Prog. & Data Representation	3
CS/ECE 2330	Digital Logic Design	3
CS 3102	Theory of Computation	3
CS 2190	CS Seminar	1
STS _____	2xx / 3xx Elective	3
	HSS or unrestricted ^{2,3} elective	<u>3</u>
		16

Fifth Semester:

CS 3330	Computer Architecture	3
CS 4102	Algorithms	3
CS _____	CS Elective ⁵	3
APMA _____	APMA Elective or 3100 ⁴	3
	HSS or unrestricted ^{2,3} elective	3
	HSS or unrestricted ^{2,3} elective	<u>3</u>
		18

Sixth Semester:

CS 3240	Adv. SW Develop. Tech.	3
CS _____	CS Elective ⁵	3
APMA _____	APMA Elective or 3100 ⁴	3
	HSS or unrestricted ^{2,3} elective	3
	HSS or unrestricted ^{2,3} elective	<u>3</u>
		15

Seventh Semester:

STS 4500	West. Tech & Culture	3
CS _____	CS Elective ⁵	3
CS _____	CS Elective ⁵ or CS 4970	3
CS 4414	Operating Systems	3
	HSS or unrestricted ^{2,3} elective	<u>3</u>
		15

Eighth Semester:

STS 4600	The Engineer in Society	3
CS _____	CS Elective ⁵	3
CS 4971 or CS 4980	Capstone course	3
	HSS or unrestricted ^{2,3} elective	3
	HSS or unrestricted ^{2,3} elective	<u>3</u>
		15

124 semester hours are the minimum required for the BS in Computer Science degree.

Notes on courses listed in the table above:

1. Science elective must be chosen from the following: BIOL 2010, BIOL 2020, CHEM 1620, ECE 2066, ENGR 2500, MSE 2090, or PHYS 2620.
2. HSS Electives are chosen from the approved list available in A122 Thornton Hall or the SEAS website.
3. Any graded course at the University except those listed specifically prohibited in the Undergraduate Record in the "Elective Courses" section of the SEAS Academic Rules and Regulations.
4. Students must take APMA 3100, and choose any two from APMA 2130, APMA 3080, or APMA 3120. (Note that APMA 2130 is 4 credits and the others are 3 credits.)
5. A CS elective is any 3 (or more) CS class at the 3000 level or higher, except those that are specifically required (CS 3102, CS 3240, CS 3330, CS 4102, and CS 4414). CS 4998 does not count (it's a BA CS class), and CS 4993 can be used at most once (3 credits) towards this requirement. Likewise, the capstone courses (CS 4971 and CS 4980) do not count. But note that ECE 4435 can count as a CS elective each (although this requires a SIS exception).