

**Computer Science (BSCS) Degree Requirement Check-list**(Requirements effective **Fall 2006**)

Student Name (Last, First): \_\_\_\_\_

Student ID number: \_\_\_\_\_

First semester at UVA: \_\_\_\_\_

UVa email ID: \_\_\_\_\_

Expected grad. sem: \_\_\_\_\_

**Required Computing & Math Courses:****Grade:****Semester (e.g F04):****Comments? (continue on back or separate sheet)**

CS 101	Intro. to Computer Sci.		
CS 201	Software Devel. Methods		
CS 202	Discrete Mathematics I		
CS 216	Program & Data Repr.		
CS 230	Digital Logic		
CS 290	CS Seminar I		
CS 302	Discrete Mathematics II		
CS 333	Computer Architecture		
CS 340	Advanced SW Devel. Tech.		
CS 414	Operating Systems		
CS 432	Analysis of Algorithms		
Computer Architecture Elective (from approved list)			
APMA 310	Probability		
APMA 213 / APMA 308 / APMA 312 (circle one)			
APMA 213 / APMA 308 / APMA 312 (circle one)			

List course: \_\_\_\_\_

**Other SEAS Required and Elective Courses:****Course: Grade: Semester:**

APMA 111		
APMA 212		
CHEM 151		
CHEM 151L		
ENGR 162		
PHYS 142E		
PHYS 142W		
PHYS 241E		
PHYS 241W		

**Course: Grade: Semester:**

STS 101		
STS 2xx/3xx		
STS 401		
STS 402		

List course: \_\_\_\_\_

**Other Electives:**

Science Elective		
HSS Elective #1		
HSS Elective #2		
HSS Elective #3		
Unrestricted Elec		

List course: \_\_\_\_\_

List course: \_\_\_\_\_

List course: \_\_\_\_\_

List course: \_\_\_\_\_

List course: \_\_\_\_\_

**CS Electives (4): Course ID & Title****Grade: Semester:**

1)			
2)			
3)			
4)			

**Tech Electives (3): Course ID & Title****Grade: Semester:****Approved by advisor: signature here:**

1)	(200+ level)			
2)	(300+ level)			
3)	(300+ level)			

**Gen. Edu. Electives (3): Course ID & Title****Grade: Semester:****Approved by advisor: signature here:**

1)				
2)				
3)				

Advisors: You may choose to do the following if you make use of this form for a graduation check during the 4<sup>th</sup> year:

(1) List Minor or Additional Majors here: \_\_\_\_\_

(2) Sign and Date below when reviewed for Application for Degree. Attach copy to SEAS application form.

## **Computer Science (BSCS) Suggested Schedule**

**(Requirements effective Fall 2006)**

### **First Semester:**

APMA 111	Single Variable Calculus	4
CHEM 151	Intro Chemistry for Engr	3
CHEM 151L	Intro Chem for Engr. Lab	1
ENGR 162	Prob. Solving & Design	4
STS 101	Lang. Comm. & Tech. Soc.	<u>3</u>
		15

### **Second Semester:**

APMA 212	Multivariate Calculus	4
PHYS 142E	Physics I	3
PHYS 142W	Physics I Workshop	1
CS 101	Intro. To Computer Sci.	3
	Science Elective <sup>1</sup>	3
	HSS Elective <sup>2</sup>	<u>3</u>
		17

### **Third Semester:**

APMA _____	APMA Elective or 310 <sup>5</sup>	3
PHYS 241E	General Physics II	3
PHYS 241W	Gen. Physics II Workshop	1
CS 201	Software Develop. Methods	3
CS 202	Discrete Math I	3
	HSS Elective <sup>2</sup>	<u>3</u>
		16

### **Fourth Semester:**

CS 216	Prog. & Data Representatn	3
CS 230	Digital Logic Design	3
CS 302	Discrete Math II	3
CS 290	CS Seminar I	1
STS _____	2xx / 3xx Elective	3
	Technical Elective <sup>3</sup>	<u>3</u>
		16

### **Fifth Semester:**

CS 333	Computer Architecture	3
CS 432	Algorithms	3
APMA _____	APMA Elective or 310 <sup>5</sup>	3
	Technical Elective <sup>3</sup>	3
	Unrestricted Elective <sup>4</sup>	<u>3</u>
		15

### **Sixth Semester:**

CS 340	Adv. SW Develop. Tech.	3
CS _____	CS Elective	3
APMA _____	APMA Elective or 310 <sup>5</sup>	3
	HSS Elective <sup>2</sup>	3
	Gen Edu Elective <sup>6</sup>	<u>3</u>
		15

### **Seventh Semester:**

STS 401	West. Tech & Culture	3
CS 414	Operating Systems	3
ECE 435 or _____	Computer Arch. Elective <sup>7</sup>	3
CS _____	CS Elective	3
	Gen Edu Elective <sup>6</sup>	<u>3</u>
		15

### **Eighth Semester:**

STS 402	The Engineer in Society	3
CS _____	CS Elective	3
CS _____	CS Elective	3
	Gen Edu Elective <sup>6</sup>	3
	Technical Elective <sup>3</sup>	<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 201, BIOL 202, CHEM 152, CHE 200, ECE 200, MSE 209, or PHYS 252.
2. HSS Electives are chosen from the approved list available in A122 Thornton Hall or the SEAS website.
3. Technical Electives are courses whose emphasis is mathematics, science, or engineering. Technical electives must be at the 200-level or higher, but at least two must be at the 300-level or higher. See the department webpage for more information. Courses that do not clearly qualify should be approved by the student's advisor and recorded with a signature on the reverse side.
4. 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.
5. Students must take APMA 310, and choose any two from APMA 213, APMA 308, or APMA 312. (Note that APMA 213 is 4 credits and the others are 3 credits.)
6. General Education Electives include all those allowed for HSS Electives and other non-technical courses. See the department webpage for more information. Courses that do not clearly qualify should be approved by the student's advisor and recorded with a signature on the reverse side.
7. Computer Architecture Elective: A student must take one course from the list of approved Computer Architecture Electives. This list includes ECE435 and specified, approved CS courses. Consult the CS webpage or your advisor for the up-to-date list. This course can be taken any semester.