BS Major in Computer Science, 2012-13
Sample Course Sequence Starting with CS 21 Computer Programming I

The definitive source for degree requirements is the official UVM Catalogue.

Your specific sequence may be different from this one. Responsibility for completion of degree requirements rests with you, the student. Read the catalog and plan your course sequence carefully. Note prerequisites. Contact your academic advisor in the Computer Science Department if you have questions.

The *minimum* number of academic credits required is 120. To complete the degree in the minimum number of credits the required Minor must also be fulfilled within these 120 credits.

	SEMESTER	
FIRST YEAR	**1st**	**2nd**
CS 16 or 21, Comp Prog. I[1a]	3	-
MATH 21, Calculus I	4	-
English I, Written Exp.	3	-
Electives[1]	4	6
CS 0XX	-	3
CS 110, Computer Prog. II	-	4
MATH 22, Calculus II	-	4
	14	**17**
SOPHOMORE YEAR		
CS 121, Computer Org.	3	-
CS 64, Discrete Structures	3	-
Electives[1]	9	3
CS 124, Data Structures	-	3
CS 125, Computability	-	3
MATH 124, Linear Alg[3]	-	3
CS 195, Probability[1,f]	-	3
	15	**15**
JUNIOR YEAR		
CS 243, Comp. Theory[2,3]	3	-
CS 2XX	3	-
Electives[1]	9	6
MATH 173, Combin.[2,3]	-	3
CS 2XX	-	3
CS 2XX	-	3
	15	**15**
SENIOR YEAR		
CS 201, Operating Sys.	3	-
CS 2XX	3	-
CS 292, Senior Seminar	1	-
Electives[1]	9	10
CS 2XX	-	3
	16	**13**

[1]**Electives**:

a) Students with no programming experience may want to take an 0XX level course with a programming component as one of their CS electives *prior* to CS 21 . See other sample sequence beginning with CS 0XX.

b) See requirements for all elective categories. Don't forget the UVM Diversity requirement.

c) **Minor:** There may be prerequisite sequences, so don't wait too long to begin.

d) **Science requirement:** 11 credits including one sequence chosen from: Biology 1 (or BCOR 11), 2 (or BCOR 12), Chemistry 31, 32, Physics 31 + 152 (31+125 can substitute). Chemistry 1 or Biology 1 is typically chosen as the first Science Elective since MATH 21 is a prerequisite for Physics 31 and 51. Biology 2 may be taken prior to Biology I.

Physics: The CS Department recommends Physics as Science Electives due to its relevance in the computing field. Physics is needed for some Minors (e.g., EE). It is not, however, an absolute requirement.

e) **Odd Credits:** Depending on your course selections you may need 1 or 2 elective credits to meet the minimum. However, you may need to take a 3-credit course because 1- or 2-credit courses are relatively rare. A 4-credit course (rather than 3) may also give you the odd credit. .

f) Use CS 195 Probability Models in CS in a Spr semester since STAT 153 may not be offered.

[2]**CS requirements** include "224 or 243." This program shows the selection of 243. Note that MATH 173 is a prerequisite for CS 224.

[3]**MATH requirements** include "two of 121, 124, 173, 271." This program shows the selection of 124 and 173. There are alternative selections.