BS Major in Computer Science 2009-10
Sample Course Sequence

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 0XX[1a]	3	-
MATH 21, Calculus I	4	-
English I, Written Exp.	3	-
Electives[1]	4	7
CS 16 or 21, Computer Prog. I	-	3
MATH 22, Calculus II	-	4
	14	**14**
SOPHOMORE YEAR		
CS 110, Computer Prog. II	4	-
CS 64, Discrete Structures	3	-
Electives[1]	9	3
CS 123, Prog. Lang.	-	3
CS 124, Data Structures	-	3
MATH 124, Linear Alg[3]	-	3
MATH 173, Combin.[2,3]	-	3
	16	**15**
JUNIOR YEAR		
CS 243, Comp. Theory[2,3]	3	-
CS 121, Comp. Org.	3	-
STAT 153, Prob/Statistics	3	-
CS 2XX	3	-
Electives[1]	3	9
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	12
CS 2XX	-	3
	16	**15**

[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.

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

d) **Science requirement:** 13 credits including one sequence chosen from: Biology 1 (or BCOR 11), 2 (or BCOR 12), Chemistry 31, 32, Physics 31 or 51, 125 or 152.

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.

[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.