

BS Major in Computer Science, 2012-13
Sample Course Sequence Starting with Math 10 Precalculus

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		*MATH 10:
FIRST YEAR	1st	2nd	These credits will count toward free electives, so the elective category has been reduced by these 3 credits.
CS 16 or 21, Computer Prog. I ^{1a}	3	-	
MATH 10, Precalculus *	3	-	¹Electives:
English I, Written Exp.	3	-	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 Computer Programming I. See other sample sequence beginning with CS 0XX.
Electives ¹	4	9	
CS 110, Computer Prog. II	-	4	
MATH 21, Calculus I	-	4	
	13	17	b) See requirements for all elective categories. Don't forget the UVM Diversity requirement.
SOPHOMORE YEAR			
CS 0XX or above, elective	3	-	c) Minor: There may be prerequisite sequences, so don't wait too long to begin.
CS 121, Computer Org.	3	-	
MATH 22, Calculus II	4	-	
CS 64, Discrete Structures	3	-	d) Science requirement: 13 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).
Electives ¹	3	3	
CS 124, Data Structures	-	3	
CS 125, Computability/Cmp	-	3	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 actually be taken prior to Biology I.
MATH 124, Linear Alg ³	-	3	
CS 195, Probability ^{1,f}	-	3	
	16	15	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.
JUNIOR YEAR			
CS 243, Comp. Theory ²	3	-	
CS 2XX	3	-	
Electives ¹	9	6	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. .
MATH 173, Combin. ^{2,3}	-	3	
CS 2XX	-	3	
CS 2XX	-	3	
	15	15	
SENIOR YEAR			
CS 201, Operating Sys.	3	-	f) Use CS 195 Probability Models in CS in a Spr semester since STAT 153 may not be offered.
CS 292, Senior Seminar	1	-	
Electives ¹	12	7	² CS requirements include "224 or 243." This program shows the selection of 243. Note that MATH 173 is a prerequisite for CS 224.
CS 2XX	-	3	
CS 2XX	-	3	
	16	13	³ MATH requirements include "two of 121, 124, 173, 271." This program shows the selection of 124 and 173. There are alternative selections.

