BA, Major in Computer Science 2012-13
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	3	-
MATH 19, Calculus I[1]	3	-
Electives[2]	9	4
CS 21,Computer Prog.I	-	3
MATH 20, Calculus II[1]	-	3
Science Elective[2]	-	4
	15[2e]	**14**
SOPHOMORE YEAR		
CS 110, Computer Prog.II	4	-
CS 64, Discrete Struct.	3	-
Electives[2]	9	6
CS 125, Computability	-	3
CS 124, Data Structures	-	3
CS 195[2f], Probability	-	3
	16[2e]	**15**[2e]
JUNIOR YEAR		
CS 121, Computer Org.	3	-
CS 2XX[3]	3	-
Electives[2]	9	12
CS 2XX[3]	-	3
	15	**15**
SENIOR YEAR		
CS 292, Senior Seminar	1	-
Electives[2]	15	8
CS 2XX[3]	-	3
CS 2XX[3]	-	3
	16	**14**

[1]**MATH:**

MATH 21 and 22 (in place of MATH 19, 20) *recommended* for the most flexibility in switching degree programs. Also, certain higher level MATH or CS courses that might be used to fill an "Advanced CS Elective" have prerequisites that would require MATH 21, 22. Some courses that require this sequence are: MATH 124 Linear Algebra, CS 266 Network Security and Cryptography, CS 274 Graphics, and more. Some Minors (e.g., EE) require MATH 21, 22.

[2]**Electives:**

Includes Arts and Sciences General and Distribution Requirements, and other elective credits.
Notes:
a) A&S General requirements from non-European cultures and Race Relations & Ethnicity. For Distribution requirements, the Math and the Natural Sciences categories are already complete within the requirements for the CS major. Therefore, students need to complete the following Distribution categories: Foreign Language, Fine Arts, Literature, Humanities, and Social Sciences.

b) Science Requirement: The Natural Science category of the A&S Distribution Requirements must be filled. A two-semester laboratory science sequence is *recommended*.

c) A **Minor** is required in this degree program. Do not wait too long to begin the Minor courses since there may be prerequisite dependencies.

d) CS courses that are not required may be considered as elective choices toward degree credits. (CS 2 is recommended for the first-year first semester if your CS background is weak or nonexistent. CS 14 Visual BASIC, CS 8 Web Design, CS 32 Puzzles, Games and algorithms, and other CS courses may also be considered if you have the prerequisites.)

e) 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.

[3]**CS Advanced Elective:**

One must be either 224 (Fall) or 243 (Spring). Three additional CS courses are required for at least 9 credits. Not more than 3 of these credits may be independent study electives.