B.S. Mathematics and Computer Science

This is just one example of how a course of study could proceed. The degree offers lots of choice, see the audit for details.

First Year

Fall

Course	Prerequisite	Credit
UN 1015 Composition		3
MA 1160 Calculus with Technology I	Qualifying ALEKS/AP/ACT/SAT score	4
MA 19XX Elementary Mathematics Topics, or other 19XX-coded courses		3
CS 1121 Intro to Programming I	MA 1031(C)/ 1032(C)/ 1120(C)	3
Essential Education: Natural and Physical Science		3
Total		**16**

Spring

Course	Prerequisite	Credit
Essential Education: Foundations of the Human World		3
Essential Education: Activities for Well-being and Success		1
MA 2330 Introduction to Linear Algebra	MA 1160/1161/1135/1121	3
MA 2160 Calculus with Technology II	MA 1160/1161/1135/1121 or qualifying AP score	4
CS 1122 Intro to Programming II	CS 1121	3
Total		**14**

Second Year

Fall

Course	Prerequisite	Credit
CS 1142 Programming at HW/SW Interface	CS 1122/1131	3
Essential Education: SHAPE		3
MA 3160 Multivariable Calc with Tech	MA 2160 or qualifying AP score	4
MA 3210 Intro to Combinatorics	MA 2320/2321/2330	3
Essential Education: Communication Intensive		3
Total		**16**

Spring

Course	Prerequisite	Credit
CS 2321 Data Structures	CS 1122/1131	3
Essential Education: Arts & Culture		3
MA 3560 Math Modeling with Diff. Eq.	MA 2160 and MA 2320/2321/2330	3
MA 2710 Intro to Statistical Analysis	MA 1160/1161/1135/1121	3
Essential Education: Intercultural Competency		3
Total		**15**

Third Year

Fall

Course	Prerequisite	Credit
Essential Education: Experience		3
Essential Education: Activities for Well-being and Success		1
MA 3310 Intro to Abstract Algebra	MA 2320/2321/2330	3
CS 3141 Team Software Project	(CS 2311 or MA 3210) and CS 2321	3
CS 3311 Formal Models of Computation	CS 2311 or MA 3210	3
Elective		3
Total		**16**

Spring

Course	Prerequisite	Credit
MA 3450 Introduction to Real Analysis	MA 2160	3
CS 3421 Computer Organization	(CS 1141 and CS 1040) or CS 1142	3
CS 3425 Intro to Database Systems	(CS 2311 or MA 3210) and CS 2321	3
Elective		3
Elective		3
Total		**15**

Fourth Year

Fall

Course	Prerequisite	Credit
Essential Education: Activities for Well-being and Success		1
CS 4321 Introduction to Algorithms	(CS 2311 or MA 3210) and CS 2321	3
Advanced Elective (CS)		3
Advanced Elective (MA)		3
Elective		3
Total		**13**

Spring

Course	Prerequisite	Credit
Advanced Elective (CS)		3
Advanced Elective (MA)		3
Advanced Elective (CS or MA)		3
MA 4900 Mathematical Sciences Project		3
Elective		3
Total		**15**

Grand Total = 120 Credits