Bachelor of Science with Major in Mathematics
Computer Science Concentration
(For Students entering in Fall 2010)

Freshman Year/Fall Semester		**Cr.**
___92.131	Calculus I	4
___91.101	Computing I	4
___ __.___	Science	3
___ __.___	Science Lab	1
___42.101	(Gen. Ed.) College Writing I	3
		15

Freshman Year/Spring Semester		**Cr.**
___92.132	Calculus II	4
___91.102	Computing II	3
___ __.___	Science	3
___ __.___	Science Lab	1
___42.102	(Gen. Ed.) College Writing II	3
		14

Sophomore Year/Fall Semester		**Cr.**
___92.231	Calculus III	4
___92.221	Linear Algebra I	3
___91.201	Computing III	4
___42.229	Writing Requirement	3
		14

Sophomore Year/Spring Semester		**Cr.**
___92.23	Differential Equations (234 or 236)	3
___92.222	Linear Algebra II	3
___ __.___	Free Elective	3
___ __.___	(Gen. Ed.) AH	3
___ __.___	(Gen. Ed.) SS	3
		15

Junior Year/Fall Semester		**Cr.**
___92.321	Discrete Structures I (see note p. 2)	3
___92.___	Prob/Statistics	3
___ __.___	Science Elective	3
___ __.___	(Gen. Ed.) AH	3
___ __.___	(Gen. Ed.) SS	3
		15

Junior Year/Spring Semester		**Cr.**
___92.322	Discrete Structures II	3
___92.362	Numerical Analysis	3
___ __.___	Free Elective	3
___ __.___	(Gen. Ed.) AH	3
___ __.___	(Gen. Ed.) SS	3
___92.375	Senior Seminar I	1
		16

Senior Year/Fall Semester		**Cr.**
___92.___	Analysis Elective	3
___92.___	Math Elective	3
___ __.___	Free Elective	3
___ 92.475	Senior Seminar II	4
___ __.___	Free Elective	3
		16

Senior Year/Spring Semester		**Cr.**
___92.___	Math Elective	3
___ __.___	Science Elective	3
___ __. ___	Science Elective	3
___ __.___	Free Elective	3
___ __.___	Free Elective	3
		15

Minimum total credits = 120

Consult the Gen. Ed. web site ***http://www.uml.edu/gened*** for General Education (Gen. Ed.) requirements.

Course selections are subject to restrictions. See reverse side for additional information.

Bachelor of Science with Major in Mathematics:
Concentration in Computer Science

Mathematics Requirements (92.xxx)

Calculus:	131,132 and 231
Linear Algebra:	221and 222
Differential Equations:	one of 234, 236
Discrete Structures:	321 and 322
Analysis I:	one of 305,411,501,503
Analysis II:	One of 301, 305, 306, 411, 412, 413, 420, 421, 442, 450
Probability & Statistics:	One of 385, 386, 486
Senior Seminar:	375 and 475
Math Electives:	One mathematics courses at the 300 level or higher (except 363)
Concentration Requirements:	322 and 362

Note: None of the above courses can be used to satisfy two different requirements.
305 and 503 cannot both be used to satisfy the two-courses Analysis requirement.

The following courses cannot be used as Electives:
Quantitative Reasoning 111; Management Precalculus 121; Management Calculus 122
Preparation for Calculus 127; Explorations in Math 151; Introduction to Statistics 283;
Intro to Data Analysis 363.

No more than 60 Math credits can be counted toward the degree.

Writing Requirement: 49.229 (Essay Writing for Non-English Majors). If a student has completed other courses with substantial writing requirements, he/she can petition to have that work count as the mathematics writing requirement. Students with a joint major in Computer Science should take 42.220 (Oral and Written Communication for CS Majors) rather than 42.229.

General Education Electives must include at least 6 courses:
3 in Arts & Humanities (AH) and 3 in Social Sciences (SS); one course must satisfy the Diversity (D) requirement and one the Ethics (E) requirement. No more than two courses from a single department can be used to satisfy these Gen Ed requirements. Math/Science Gen ED requirements are fulfilled by the major's courses.

Computer Science Minor: Successful completion of two appropriate Computer Science courses (at least one 300 level or above) as a free electives will satisfy the requirements for a Minor in Computer Science.

Computer Science Major: Successful completion of appropriate Computer Science Courses as free electives will satisfy the requirements for a Major in Computer Science.

Advice to Students: If you plan any deviations from this sample program of study, use an Academic Petition signed by the Mathematics Department Chair to receive written permission. Keep a copy of any signed Academic Petition for your own files.

Bachelor of Science Requirements: A minimum of 74 credits and 20 courses from the Offerings of science and mathematics; four science lecture courses with co-requisite labs, including a two semester sequence in a department other than Mathematics—91.101(Computing I), 91.102 (Computing II), 92.231/232 (Calculus III & Math Lab I) and 92.236 (Engineering Diff.Eqns) qualify.