

**Bachelor of Science with Major in Mathematics
Concentration in Applied/Computational Mathematics
(For Students Entering in Fall 2009)**

Freshman Year / Fall Semester	Cr.	Freshman Year / Spring Semester	Cr.
___ 92.131 Calculus I	4	___ 92.132 Calculus II	4
___ 91.101 Computing I	3	___ 92.321 Discrete Structures I(see p2)	3
___ . . . Science	3	___ . . . Science	3
___ . . . Science Lab	1	___ . . . Science Lab	1
___ 42.101 (Gen Ed) College Writing I	<u>3</u>	___ 42.102 (Gen Ed) College Writing II	<u>3</u>
	14		14
Sophomore Year / Fall Semester	Cr.	Sophomore Year / Spring Semester	Cr.
___ 92.231 Calculus III	4	___ 92. . . Differential Equations (234 or 236)	3
___ 92.221 Linear Algebra I	3	___ 92.222 Linear Algebra II	3
___ . . . Science	3	___ . . . Science	3
___ . . . Science Lab	1	___ . . . Science Lab	1
___ 42.229 Writing Requirement	<u>3</u>	___ . . . (Gen Ed) AH	3
	14	___ . . . (Gen Ed) SS	<u>3</u>
			16
Junior Year / Fall Semester	Cr.	Junior Year / Spring Semester	Cr.
___ 92.301 Intro Applied Math I	3	___ 92.362 Numerical Analysis I	3
___ 92. . . Analysis Elective	3	___ 92. . . Analysis Elective	3
___ 92. . . Prob/Statistics Elective	3	___ 92.3/400 Math Elective	3
___ . . . (Gen Ed) AH	3	___ . . . (Gen Ed) AH	3
___ . . . (Gen Ed) SS	<u>3</u>	___ . . . (Gen Ed) SS	3
	15	___ 92.375 Senior Seminar I	<u>1</u>
			16
Senior Year / Fall Semester	Cr.	Senior Year / Spring Semester	Cr.
___ 92. . . Math Elective	3	___ . . . Science Elective	3
___ 92.3/400 Concentration Elective	3	___ 92.3/400 Math Elective	3
___ . . . Free Elective	3	___ . . . Free Elective	3
92.475 Senior Seminar II	3	___ . . . Free Elective	3
___ . . . Free Elective	<u>3</u>	___ . . . Free Elective	<u>3</u>
	15		15

Minimum total credits = 120

Consult the *Schedule of Classes* booklet regarding General Education (Gen. Ed.) requirements.

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

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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:	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:

Quantities Reasoning 111; Management Precalculus 121; Management Calculus122
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.

Computing Requirement: 91.101 (Computing I)

Writing Requirement: 42.229 (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 satisfy 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.**

Advice to Students: If you plan any deviations from this sample program of study, use an Academic Petition signed by the Mathematics Department Chair or Undergraduate Coordinator 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 corequisite 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.