

**Bachelor of Science with Major in Mathematics
General Option
(For Students entering in Fall 2008)**

Freshman Year / Fall Semester	Cr.	Freshman Year / Spring Semester	Cr.
___ 92.131 Calculus I	4	___ 92.132 Calculus II	4
___ . . . Free Elective	3	___ 92.321 Discrete Structures I	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	___ 92.23 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. . . 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. . . Basic Analysis Elective	3	___ 92. . . Analysis Elective	3
___ 92. . . Prob/Statistics Elective	3	___ 92.3 . . Math Elective	3
___ . . . (Gen Ed) AH	3	___ 92.375 Senior Seminar I	1
___ . . . (Gen Ed) SS	3	___ . . . (Gen Ed) SS	3
___ . . . Computing Requirement	<u>3(4)</u>	___ . . . Science Elective	3
	15(16)	___ . . . (Gen Ed) AH	<u>3</u>
			16
Senior Year / Fall Semester	Cr.	Senior Year / Spring Semester	Cr.
___ 92.3 . . Math Elective	3	___ 92. . . Math Elective	3
___ . . . Science Elective	3	___ . . . Science Elective	3
___ 92.475 Senior Seminar II	3	___ . . . Science Elective	3
___ . . . Free Elective	3	___ . . . Free Elective	3
___ . . . Free Elective	<u>3</u>	___ . . . Free Elective	<u>3</u>
	15		15

Minimum total credits for graduation = 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.

Bachelor of Science with Major in Mathematics: No Concentration

Notes:

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

Preparation for Calculus (92.127) cannot be used as an elective.

Introduction to Data Analysis (92.363) cannot be used as a Math Elective.

Mathematics requirements: A minimum of 46 credits in the Mathematics Department, including: 92.131, 92.132, 92.231 (Calculus I-III); 92.221, 92.222 (Linear Algebra I,II); 92.234 or 92.236 (Differential Equations); 92.321 or 92.322 (Discrete Structures I or II); one basic analysis course (92.305, 92.411, 92.501, 92.503); one additional analysis course (92.301, 92.305, 92.306, 92.322, 92.362, 92.411, 92.412, 92.413, 92.421, 92.420, 92.442, 92.450); one course in probability and statistics (92.385, 92.386, 92.486); 92.474 and 92.475 (Senior Seminar I and II); three mathematics electives at 300, 400 or 500 level, if prerequisites are met.

Note: A student may not take both 92.305 and 92.503 to satisfy the two-course analysis requirement.

A student who uses 92.322 (Discrete Structures II) to satisfy the discrete structures requirement may not use it to satisfy the analysis requirement.

Computing Requirement: 91.101 (Computing I) or 92.576 (Statistical Programming Using SAS) or another computer programming class as approved by the Undergraduate Coordinator or Department Chair.

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.

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 (2 from each of two Math/Science departments; or 4 from one Math/Science department; or 3 from Physics and 1 from the College of Engineering; or 2 from Physics and 2 from any one department in the College of Engineering).

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.

Mathematics Concentrations: In addition to the general Mathematics (No Concentration) Major, 6 concentrations are available to students:

Applied/Computational Mathematics	Computer Science
Bioinformatics	Probability/Statistics
Business Applications	Teaching

A total of 55 mathematics credits are required to complete a concentration.

If interested, a student should check requirements with his/her advisor or with the undergraduate coordinator.

To have the concentration appear on the transcript, the Registrar must be informed of a student's concentration.

Advice to Students: Any deviations from this sample program of study require permission of the Mathematics Department Chair or Undergraduate Coordinator. To receive written permission, use an Academic Petition form and keep a copy for your own files.