

**Bachelor of Science with Major in Mathematics  
Concentration in Business Applications  
(For Students entering in Fall 2008)**

<b>Freshman Year / Fall Semester</b>	<b>Cr.</b>	<b>Freshman Year / Spring Semester</b>	<b>Cr.</b>
___ 92.131 Calculus I	4	___ 92.132 Calculus II	4
___ . . . Free Elective	3	___ 92.321 Discrete Structures I (see note p. 2)	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>
	<b>14</b>		<b>14</b>

<b>Sophomore Year / Fall Semester</b>	<b>Cr.</b>	<b>Sophomore Year / Spring Semester</b>	<b>Cr.</b>
___ 92.231 Calculus III	4	___ 92.234/236 Differential Equations	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	3	___ . . . (Gen Ed) AH	3
	<u>3</u>	___ . . . (Gen Ed) SS	<u>3</u>
	<b>14</b>		<b>16</b>

<b>Junior Year / Fall Semester</b>	<b>Cr.</b>	<b>Junior Year / Spring Semester</b>	<b>Cr.</b>
___ 92. . . Analysis Elective	3	___ 92. . . Analysis Elective	3
___ 92. . . Prob/Statistics Elective	3	___ 92.3/400 Math Elective	3
___ . . . (Gen Ed) AH	3	___ 49.202 Economics II	3
___ . . . (Gen Ed) SS	3	___ . . . (Gen Ed) AH	3
___ 49.201 Economics I	<u>3</u>	___ . . . (Gen. Ed) SS	3
	<b>15</b>	___ 92.375 Senior Seminar I	<u>1</u>
			<b>16</b>

<b>Senior Year / Fall Semester</b>	<b>Cr.</b>	<b>Senior Year / Spring Semester</b>	<b>Cr.</b>
___ 92. . . Math Elective	3	___ 92. . . Math Elective	3
___ . . . Science Elective	3	___ . . . Concentration Elective	3
___ . . . Computing requirement	3	___ . . . Science Elective	3
___ 92.475 Senior Seminar II	3	___ . . . Science Elective	3
___ . . . Free Elective	<u>3</u>	___ . . . Science Elective	<u>3</u>
	<b>15</b>		<b>15</b>

**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.

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**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 not used to fulfill another requirement (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.

Concentration Electives: 49.201, 49.202 and one additional elective not used to fulfill any other requirement, such as: 92.386, 92.486, 92.509, 92.576, 92.579, 92.582, 92.585, 92.588, 92.589, 92.590, 92.592. Concentration Electives can be in Mathematics or another approved department.

**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 corequisite 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.

**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 Petitions for your own files.