

**College of Arts and Science**

**GRADUATION PLAN: Bachelor of Science in Mathematics with Emphasis in Actuarial Science and Mathematical Finance**

Name (Last, First)

Student Number

Date Form Filled

First College Semester      Semester of Graduation      Degree

Local Address (include email address)

Permanent Address

**REQUIRED MATH COURSES**

COURSE NO.	TITLE OF COURSE	CREDIT HOURS	
MATH 1500	Calculus I		
MATH 1700	Calculus II		
MATH 2300	Calculus III		
MATH 4100	Differential Equations		
MATH 4140	Matrix Theory		
MATH 4700	Advanced Calculus of One Real Variable I		
MATH 4315/STAT4710	Introduction to Mathematical Statistics		
MATH 4320/STAT 4750	Introduction to Probability Theory		
MATH 4355	Investment Science I		
MATH 4370	Actuarial Modeling I		
MATH 4371	Actuarial Modeling II		
MATH 4520/STAT 4760	Statistical Inference I		

**MATH CAPSTONE COURSES:** Choose either MATH 4970 (Senior Seminar) or MATH 4980 (Mathematics Problem Solving).

COURSE NO.	TITLE OF COURSE	CREDIT HOURS	

**BASIC PROGRAMMING COURSES:** Choose either CMP\_SC 1040 (Introduction to Problem Solving and Programming) and CMP\_SC 1050 (Algorithm Design and Programming I).

COURSE NO.	TITLE OF COURSE	CREDIT HOURS	

Choose either MATH 2320 (Discrete Mathematical Structures) or CMP\_SC 2050 (Algorithm Design and Programming II).

COURSE NO.	TITLE OF COURSE	CREDIT HOURS	

**ADDITIONAL REQUIREMENTS:** Listed below are required courses that are offered by other departments.

COURSE NO.	TITLE OF COURSE	CREDIT HOURS	
STAT 4870	Time Series Analysis		
STAT 4510	Applied Statistical Models I		
ECONOM 1014	Principles of Microeconomics		
ECONOM 1015	Principles of Macroeconomics		

Select a minimum of 5 credits from BIO\_SC 1500 (General Biology), CHEM 1310 (General Chemistry I), CHEM 1320 (General Chemistry II), CHEM 1330 (General Chemistry III), PHYSICS 2750 (University Physics I) or PHYSICS 2760 (University Physics II).

COURSE NO.	TITLE OF COURSE	CREDIT HOURS	

**ELECTIVES:** It is recommended that FINANC 3000 (Corporate Finance), FINANC 4020 (Investments), and MATH 4590 (Investment Science II) are chosen as electives.

COURSE NO.	TITLE OF COURSE	CREDIT HOURS	

**Total hours:**

Student \_\_\_\_\_ Date \_\_\_\_\_

Advisor \_\_\_\_\_ Date \_\_\_\_\_

Director of Undergraduate Studies \_\_\_\_\_ Date \_\_\_\_\_

A&S Dean \_\_\_\_\_ Date \_\_\_\_\_

**ARTS & SCIENCE FOUNDATION REQUIREMENTS**  
 (List courses already completed and those to be completed)

BASIC SKILLS	TITLE OF COURSE	HOURS	TOTAL
English Composition	ENGL 1000 Exposition and Argumentation		

**Foreign Language: 12-13 hours or comparable proficiency required**

Chinese I, II (12 hrs)      Greek I, II, III (13 hrs)      Japanese I, II (12 hrs)      Portuguese I, II (12 hrs)  
 French I, II, III (13 hrs)      Hebrew I, II, III, IV (12 hrs)      Korean I, II, III (13 hrs)      Russian I, II (12 hrs)  
 German I, II, III (13 hrs)      Italian I, II (12 hrs)      Latin I, II, III (13 hrs)      Spanish I, II, III (13 hrs)

FOREIGN LANGUAGE	TOTAL HOURS

**Foreign Language Alternative: 12 hours of courses from one area outside of mathematics in the 2000, or above, level**

DEPT.	COURSE #	TITLE OF COURSE	HOURS	TOTAL

**DEPTH OF STUDY**

6 hours must be courses numbered 2000, or above, and taken in at least two of the following Breadth of Study fields: Behavioral Science, Social Sciences, Humanities and Fine Arts

**BREADTH OF STUDY**

**Biological, Physical, and Mathematical Sciences:** See Related Field Courses for Department of Mathematics Requirements.

**Behavioral and Social Sciences:** 9 hours and must include courses from both the behavioral and social sciences.

DEPT.	COURSE #	TITLE OF COURSE	HOURS	TOTAL

**Humanities and Fine Arts:** At least 9 hours and must include courses from at least two different areas.

DEPT.	COURSE #	TITLE OF COURSE	HOURS	TOTAL

Total hours:

WARNING:                      additional hours are needed for graduation.

After printing this form, have it signed and dated by your advisor and the Director of Undergraduate Studies (Professor Ian Aberbach, 201 Mathematical Sciences Building, 882-4898) in the spaces on the previous page. You will then need to make two photocopies of the signed form and an appointment with an advisor in the Arts & Science Dean's Office (107 Lowry Hall, 882-6411) to turn in your completed form.