

College of Arts and Science: Graduation Plan for Bachelor of Science in Mathematics with Emphasis in Actuarial and Financial Mathematics

You may file a Graduation Plan in Math after completion of English 1000 and Math 2300. You must have an overall GPA of 2.5 or above, and a GPA in Math courses used for the degree of 2.5 or above. All Math courses used for the major must be passed with a C- grade or above.

Name (Last, first): _____

Pawprint: _____

Student Number: _____

Expected Graduation Semester: _____

Date: _____

Required Math Courses

Course No.	Course Title	Cr. hrs.	Course No.	Course Title	Cr. hrs.
MATH 1500	Calculus I	5	MATH 4315/STAT 4710	Intro to Math Statistics	3
MATH 1700	Calculus II	5	MATH 4320/STAT 4750	Intro to Probability Theory	3
MATH 2300	Calculus III	3	MATH 4520/STAT 4760	Statistical Inference	3
MATH 3000	Intro to Adv Math	3	MATH 4355	Mathematics of Financial Derivatives I	3
MATH 4100	Differential Equations	3	MATH 4370	Interest Theory	3
MATH 4140	Matrix Theory	3	MATH 4371	Models for Life Contingencies I	3
MATH 4700	Adv Calc of One Real Var I	3	MATH 4372	Models for Life Contingencies II	3

Required Courses outside of Mathematics

Course No.	Course Title
STAT 4870	Time Series Analysis
STAT 4510	Applied Statistical Models I
ECONOM 1014	Principles of Microeconomics
ECONOM 1015	Principles of Macroeconomics

Actuarial Exam Requirement

Students are required to *attempt* the following actuarial science exams, as administered by the SOA or CAS, or comparable institution. Documentation must be provided to the Undergraduate Mathematics Advisor demonstrating such an attempt has been made. A passing score on the exam is not required.

Probability Exam – Approved: _____ Date: _____

Financial Mathematics Exam – Approved: _____ Date: _____

Science Requirement

A minimum of 4 hours from courses below.

BIO_SC 1500 (General Biology), CHEM 1320 (College Chemistry I), CHEM 1330 (College Chemistry II), PHYSCS 2750 (University Physics I), PHYSCS 2760 (University Physics II) The Bio and Physics courses are 5 credits each. Chem 1320 and 1330 are 4 credits each.

Science course(s) (Dept and Number): _____

Optional Courses

The following three courses are recommended for students intending to pursue Actuarial work. These courses are not required for the degree but are associated with VEE requirements or Actuarial Exams.

ACCTCY 2036 (Accounting I) and FINANC 3000 (Corporate Finance), MATH 4590 (Mathematics of Financial Derivatives II)

BASIC PROGRAMMING REQUIREMENT (circle one)

INFOTC 1040 (Intro to Problem Solving and Programming), or CMP SC 1050 (Algorithm Design and Programming I)

SIGNATURES

Student _____ Date _____

Undergraduate Mathematics Advisor _____ Date _____

Dean of A & S _____ Date _____

After filling out this form, have it signed and dated by the Undergraduate Mathematics Advisor (Dustin Belt, 201 Math Sciences Bldg., 573-882-4898). Make two photocopies of the signed form. Then make an appointment to file a grad plan in Math with the A&S Advising Office (107 Lowry Hall, 573-882-6411). Bring all three copies to this appointment to get the Dean's stamp.

Last updated: 4/2018

ARTS & SCIENCE FOUNDATION REQUIREMENTS

Please see <http://generaleducation.missouri.edu/courses/> for a searchable web page. You may check which courses are general education courses, and see which College (e.g., A&S), the course is taught in. This information is important for the A&S DEPTH requirement below.

ENGLISH COMPOSITION REQUIREMENT You must complete ENGLSH 1000, Exposition and Argumentation.

FOREIGN LANGUAGE OR ALTERNATIVE You may complete this requirement in one of four ways: being a non-native English speaker, 4 years of a language in high school, complete a language sequence at MU, or complete the Foreign Language Alternative.

Check if you are a non-native English speaker, or

Check if you completed 4 years of a foreign language in high school (in this case, no credit hours from that language at the introductory level may be used toward graduation), or

Check if you will complete a Foreign Language at MU, and circle one:

Chinese, French, German, Greek, Hebrew, Italian, Japanese, Korean, Latin, Portuguese, Russian, Spanish,

or

Check if you will complete a Foreign Language Alternative (12 hours of courses from one area outside of Mathematics at the 2000 level or above — this must be approved by the Undergraduate Mathematics Advisor). List courses in the table.

Dept.	Course No.	Course Title	Cr. hrs.

BREADTH OF STUDY

<p>Behavioral and Social Sciences: 9 hours combined, with at least one behavioral science and one social science. At most one course may be a non A&S course.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Dept.</th> <th>Course No.</th> <th>Cr. hrs.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Dept.	Course No.	Cr. hrs.										<p>Humanities and Fine Arts: 9 hours from at least two different departments. At most one course may be a non A&S course.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Dept.</th> <th>Course No.</th> <th>Cr. hrs.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Dept.	Course No.	Cr. hrs.									
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DEPTH OF STUDY

<p>6 hours of courses (total) from at least 2 of the 3 categories below. These must be 2000 level (or above) general education courses, and at least one must be taught by a department in A&S. These courses may also be listed in the BREADTH section.</p> <ul style="list-style-type: none"> • Social Science: _____ • Behavioral Science: _____ • Humanities and Fine Arts: _____
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AMERICAN HISTORY OR GOVERNMENT REQUIREMENT

See <http://generaleducation.missouri.edu/requirements/> for courses available. This course may also be listed as a Social Science BREADTH and/or DEPTH course.

MO gov't course: _____

A&S DIVERSITY REQUIREMENT (DI)-For students beginning college Fall 2017 or later

See <https://coas.missouri.edu/diversity-intensive-course-list> for courses available. This course may also be listed as a BREADTH and/or DEPTH course.

DI course: _____

ADDITIONAL A&S AND MU REQUIREMENTS

- Writing Intensive requirement: You must have two WI courses. Math 3000 will be your WI course in your major. The other may be anywhere in the curriculum (e.g., a course satisfying your BREADTH requirement). Please see <http://generaleducation.missouri.edu/requirements/writing.php> for more information.
- 30 of the last 36 hours must be taken as MU courses.
- GPA requirements for graduation: A 2.0 cumulative, in the major, in any minor, in the final 30 hours, and in the final 60 hours.
- 120 hours of degree applicable credits (132 if you are getting a dual degree).