SAMPLE Four-Year Plan

B.S. Mathematics - Actuarial Science Emphasis

The curriculum in the mathematics major is somewhat structured but students can move through the coursework in many ways. This four-year plan illustrates one possible path a student could take to complete a degree in four years. This is not an official document and is not the only way that a mathematics degree can be completed in four years. Current students should refer to their individual degree audit for specific graduation requirements. Courses in bold indicate major-based coursework that is completed in the first year.

First Year

Fall Semester	Units
MATH 253 Calculus & Analytic Geometry I	5
COMPSCI 170, 172, 174, 220, 221, or 222	3
ENGLISH 101 Intro to College Writing and Reading	3
CORE 130 Individual and Society	3
INTRAUNV 104 New Student Seminar	1
Total Credits	**15**

Spring Semester	Units
MATH 200 Mathematics: Form and Function (S)	1
MATH 254 Calculus & Analytic Geometry II	4
STAT 263 Introduction to R	1
ENGLISH 102 Intro to College Writing, Reading & Research	3
CORE 120 or 140 Historical or Global Perspectives	3
PEGNRL 192 Personal Health & Fitness	1
Total Credits	**13**

Notes: The math and English courses you will take during your first year will depend on ACT/SAT sub-scores or UW System placement exam scores. This four-year plan reflects the math and English courses most common for students in this major. All students are encouraged to complete placement testing prior to attending Warhawks SOAR (Student Orientation, Advising, and Registration).

Opportunities: Participating in a university-sponsored club, such as the Actuarial Club or Student Math Association, is strongly encouraged. Involvement in a club or activity will help you develop interpersonal and leadership skills and add to your resume. Additionally, many math majors are ready to tutor after their first year and can be employed through the Student Success Center to tutor students in Quantitative Reasoning, College Algebra, or Calculus I. On-campus tutoring helps students develop technical communication skills.

Second Year

Fall Semester	Units
MATH 255 Calculus & Analytic Geometry III	4
STAT 342 Applied Statistics	3
CORE 110 World of the Arts	3
COMM 110 Intro to Public Speaking	3
Minor course	3
Total Credits	**16**

Spring Semester	Units
MATH 355 Matrices & Linear Algebra	3
MATH 346 Theory of Interest	3
Minor course	3
University Requirement Lab Science (GL) course	4-5
Total Credits	**13-14**

Notes: Students are encouraged to start thinking about selecting a minor in the second year. Common minors selected by actuarial science emphasis students include: Finance, General Business, and Insurance because they support the VEE credits.

Opportunities: An internship is an optional experiential learning opportunity that provides students with hands-on experience in a potential career field with supervision and coaching from prospective employers. In addition, completing an internship allows students to differentiate themselves in a competitive job market. Students should begin planning for an internship during their sophomore year and can complete the internship in the summer before their junior or senior years. The internship course MATH 493 may count as an upper-level technical elective.

Actuarial Exams: Math 346 prepares students to take the Society of Actuaries Exam FM. Math 343 and Math 442 prepare students to take Exam P. Students are recommended to take the exam the summer after completing the relevant course(s). See: https://www.soa.org for more information.

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Department Contact Information

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https://www.uww.edu/cls/departments/math

Third Year

Fall Semester	Units
MATH 343 Applied Probability Theory (F)	3
MATH 280 Discrete Mathematics	3
ENGLISH 370 or PWP 372	3
Degree Requirement Lab Science (GL) course	4-5
Minor course	3
Total Credits	**16-17**

Spring Semester	Units
MATH 442 Mathematical Statistics (S)	4
CORE 390 World of Ideas	3
General Education elective	3
Minor course	3
Minor course	3
Total Credits	**16**

Notes: Students earn VEE credits from earning a B- or better in each of the following courses: ACCOUNT 244, FNBSLW 344, ECON 201, ECON 202, and MATH 442. Many of these courses count towards business minor requirements. Additional insurance courses from the Finance and Business Law department are recommended.

Opportunities: Undergraduate research is not required as part of the mathematics program but is highly recommended for students who have an interest in attending graduate school in the future. Completing a directed research project with a faculty mentor has many benefits: it develops a student's critical thinking and writing abilities, signals to graduate school programs that a student is prepared for independent research of their own, and it can provide a student with financial support since many undergraduate research opportunities are paid.

Fourth Year

Fall Semester	Units
STAT 420 Applied Regression Analysis	3
MATH 301 Introduction to Analysis	3
U.S. Racial/Ethnic Diversity (DV) course	3
Minor course	3
Minor course	3
Total Credits	**15**

Spring Semester	Units
Minor course	3
General Education elective	3
General Education elective	3
Elective course(s) to reach 120 credits	3-7
Total Credits	**12-16**

Notes: All students must earn 120 credits to earn a bachelor's degree and many students have the opportunity to choose additional courses in the fourth year to expand skills, explore interests, or try something new. We recommend additional courses in statistics and business.

Opportunities: After passing the first two Actuarial Exams, many students are ready to begin preparing for a third exam on their own, especially those who have taken some additional courses in insurance.

Planning for Graduation: Students are encouraged to apply for graduation one full semester prior to their intended graduation date. Information about commencement and the application for graduation are on the Registrar's Office website (http://www.uww.edu/registrar/graduation).

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