

ACCELERATED BACHELOR'S TO MASTER'S IN MATHEMATICS WITH ACTUARIAL SCIENCE AND PREDICTIVE ANALYTICS

Admitted Mathematics majors in the Actuarial Science and Risk Management (ASRM) concentration are eligible to apply for the accelerated Bachelor's to Master's of Science in Actuarial Science and Predictive Analytics Program. This program allows students to complete their undergraduate and graduate degrees in a shorter time frame.

Admission Requirements

- Students must be admitted undergraduates in the Mathematics major with an Actuarial Science and Risk Management Concentration.
- Students may apply for the accelerated program during the first term of their junior year (60 units completed).
- A minimum undergraduate GPA of 3.00 in Mathematics courses, at the time of application, is required for full admission to the program. AND
- Students must also meet one of the following requirements:
 - Completed Math 273/283 (Calculus I), Math 274/284 (Calculus II), and Math 331 (Probability) with a grade of at least B in all three on the first attempt.
 - Received a passing score on at least one SOA exam.
- During the senior year, the student must also complete an online graduate application with the Admissions Office. Admission to the graduate program is based on meeting the overall graduate admission requirements and earning a "B" or better in each graduate course taken as part of the accelerated program.

Accelerated Bachelor's-Master's Degree Requirements

Nine units of 500-600 level courses can be counted toward both the undergraduate and graduate programs. A bachelor's degree is awarded in Math-ASRM after all the bachelor's degree requirements are met, normally in the fourth year. The ASPA-MS degree is awarded at the completion of all degree requirements for the graduate program including the remaining 7 graduate courses and after passing at least two Society of Actuaries professional exams (before or during the graduate study). Graduate courses must be completed at a "C" or better level to apply to the undergraduate and graduate degree requirements.

Students will choose two or three courses (up to nine units) from the list below, in consultation with their adviser, which will be allowed to count toward both degrees.

MATH 538	FUNDAMENTALS OF LONG-TERM ACTUARIAL MATHEMATICS (in place of MATH 438)	4
MATH 541	FUNDAMENTALS OF SHORT-TERM ACTUARIAL MATHEMATICS (in place of MATH 441)	3
MATH 542	ADVANCED SHORT-TERM ACTUARIAL MATHEMATICS (in place of MATH 442)	3
MATH 547	STATISTICS FOR RISK MODELING (in place of MATH 447)	3
MATH 548	ADVANCED LONG-TERM ACTUARIAL MATHEMATICS (in place of MATH 448)	3
MATH 585	MATHEMATICAL FINANCE (in place of MATH 485)	3
MATH 586	RISK MANAGEMENT AND FINANCIAL ENGINEERING (in place of MATH 486)	3

Withdrawal and Ineligibility

- Continuance in the master's program is contingent upon maintaining a minimum overall GPA of 3.00; students who do not maintain the minimum GPA will be ineligible to continue graduate work.
- Students who do not successfully complete the bachelor's portion of this program, or whose GPAs do not meet the requirements for this program, may not proceed to the graduate-level unless such deficiencies are resolved.
- Students who complete the bachelor's but decide not to continue with the Master's program will terminate their program with the fulfillment of all requirements for the Bachelor's degree.
- The student will be allowed to use the graduate courses to complete the bachelor's degree.
- Students may withdraw from the combined bachelor's – master's degree program in Actuarial Science and Predictive Analytics at any time by informing the Chairperson and Graduate Program Director to that effect in writing.
- A student who does not follow the approved plan of graduate work may become ineligible to participate in this combined degree program.
- If a student becomes ineligible to participate in the combined program, the Actuarial Science and Predictive Analytics Program Director shall inform the student in writing.
- A student who is ineligible to continue participation in or who withdraws from the combined degree program cannot double-count any courses for both bachelor's and master's degrees.

Code	Title	Units
MATH 533	APPLIED REGRESSION AND TIME SERIES PREDICTIVE MODELING (in place of MATH 337)	4