

MATHEMATICS: ACTUARIAL SCIENCE OPTION

Bachelor of Science (BS)

This is a guide based on the 2023-2024 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use Degree Works to monitor their individual progress.

CURRICULUM CHECKLIST

85 Hour Major – No Minor Required

- ___ AC221 Principles of Accounting I (3)
- ___ AC222 Principles of Accounting II (3)
- ___ EC215 Principles of Microeconomics (3)
- ___ EC225 Principles of Macroeconomics (3)
- ___ FI361 Financial Management (3)
- ___ MA140 Analytic Geometry & Calculus I (5)
- ___ MA145 Analytic Geometry & Calculus II (4)
- ___ MA160 Introduction to Mathematical Ideas (3)
- ___ MA223 Elementary Probability and Statistics (3)
- ___ MA244 Analytic Geometry & Calculus III (4)
- ___ MA250 Foundations of Mathematics (3)
- ___ MA323 Statistical Methods (3)
- ___ MA345 Linear Algebra (3)
- ___ MA375 Theory of Interest (3)
- ___ MA385 Financial Mathematics (3)
- ___ MA425 Applied Regression Analysis (3)
- ___ MA523 Probability & Statistics I (3)
- ___ MA524 Probability & Statistics II (3)
- ___ MA526 Actuarial Seminar (3)
- ___ MA530 Statistical Learning (3)
- ___ MA575 Time Series/Forecasting (3)
- ___ MA585 Fundamentals of Actuarial Mathematics I (3)

Choose 3 hours - programming course:

- ___ CS101 Introduction to Computer Programming (3)
- ___ MA334 Mathematical Programming (3)

Choose 12 hours:

- ___ EC351 Applied Economic Models (3)
- ___ EC490 Business Forecasting (3)
- ___ FI351 Principles of Insurance (3)
- ___ FI362 Advanced Financial Management (3)
- ___ FI368 Investments (3)
- ___ MA350 Differential Equations I (3)
- ___ MA475 Multivariate Methods (3)
- ___ MA550 Differential Equations (3)
- ___ MA580 Experimental Design and Analysis of Variance (3)
- ___ MK301 Principles of Marketing (3)
- ___ MK348 Brand Marketing (3)

General Education Requirements – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 6 hours
- Constitution Requirement – 3 hours
- Written Communication – 6 hours
- Oral Communication – 3 hours
- Natural Sciences – 7 hours (from two disciplines, one to include a lab)
- Mathematics – 3 hours
- Humanities & Fine Arts – 9 hours (from at least two disciplines)
- Additional requirements – 5 hours (to include UI100 for native students)
- Civics examination

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	Hrs	Course #	Hrs
FIRST YEAR	UI100	1	AC222	3
	EN100	3	MA145	4
	AC221	3	MA223	3
	MA140	5	General Education	3
	MA160	3	General Education	3
	Total	15	Total	16
SECOND YEAR	EC215	3	EC225	3
	MA244	4	MA345	3
	MA250	3	CS101/MA334	3
	MA323	3	General Education	3
	General Education	3	General Education	3
	Total	16	Total	15
THIRD YEAR	MA375	3	FI361	3
	MA425	3	MA385	3
	MA523	3	MA524	3
	MA530	3	MA526	3
	General Education	3	MA575	3
	Total	15	Total	15
FOURTH YEAR	Major elective	3	MA585	3
	Major elective	3	Major elective	3
	General Education	3	Major elective	3
	General Education	3	General Education	3
	General Education	3	General Education	3
	Total	15	Total	15

Degree requirements for all students: a minimum of 120 credit hours, completion of the General Education program, and completion of 39 senior division hours (300-599). Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

A minimum 2.0 GPA in the major and overall are required to graduate with a BS degree.



Revised
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2023-2024 *degree map*



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