

# Mathematics Major with Actuarial Concentration

## B.S. in Mathematics-Actuarial Science Concentration - Curriculum Map 2019-2020 Catalog

Course	Cr.Comp	Course	Cr.Comp
<b>FRESHMAN</b>			
<b>Fall</b>		<b>Spring</b>	
EN 101 Composition and Literature I	3	EN 102 Composition and Literature II	3
General Education History ( <a href="http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal3humanexpressioninliteraturehistoryartshur">http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal3humanexpressioninliteraturehistoryartshur</a> )	3	General Education Lab Science ( <a href="http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal4naturalsciencetext">http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal4naturalsciencetext</a> )	4
General Education Lab Science ( <a href="http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal4naturalsciencetext">http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal4naturalsciencetext</a> )	4	MA 122 Calculus II (General Education Math) <sup>c1</sup>	4
MA 121 Calculus I (General Education Math) <sup>c1</sup>	4	MA 241 Mathematical Computation and Modeling	3
Fall Semester Total Cr.:		Spring Semester Total Cr.:	
14		14	
<b>SOPHOMORE</b>			
<b>Fall</b>		<b>Spring</b>	
EC 201 Principles of Economics (Macro) (General Education Social Science) <sup>b,c</sup>	3	EC 202 Principles of Economics (Micro) <sup>b,c</sup>	3
EN 201 World Literature I (General Education Literature)	3	EN 202 World Literature II	3
MA 223 Calculus III <sup>c1</sup>	4	MA 224 Differential Equations <sup>c1</sup> ,	4
MA 306 Discrete Mathematics <sup>c2</sup>	3	MA 310 Linear Algebra <sup>c2</sup>	3
PS 211 University Physics I	4	PS 212 University Physics II	4
Fall Semester Total Cr.:		Spring Semester Total Cr.:	
17		17	
<b>JUNIOR</b>			
<b>Fall</b>		<b>Spring</b>	
General Education Arts & Humanities ( <a href="http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal3humanexpressioninliteraturehistoryartshumanitiestext">http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal3humanexpressioninliteraturehistoryartshumanitiestext</a> )	3	MA Elective (300-400 level)	3
General Education Leadership ( <a href="http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal8leadershiptext">http://catalog.norwich.edu/residentialprograms/catalog/generaleducationgoals/#goal8leadershiptext</a> )	1-3	MA 312 Statistical Methodology II <sup>b,c</sup>	3
MA Elective	3	MA 419 Internship in Mathematics (or any MA course) <sup>3</sup>	3
MA 250 Communication in Mathematics	1	PH 303 Survey of Ethics (General Education Ethics) or 350 Medical Ethics	3
MA 303 Advanced Calculus I <sup>2, c2</sup> or 309 Algebraic Structures	3	Free Elective	3
MA 311 Statistical Methodology <sup>b,c, c2</sup>	3		
Free Elective	3		
Fall Semester Total Cr.:		Spring Semester Total Cr.:	
17-19		15	
<b>SENIOR</b>			
<b>Fall</b>		<b>Spring</b>	
MA 309 Algebraic Structures <sup>2, c2</sup> or 303 Advanced Calculus I	3	MA 321 Financial Mathematics (or any MA course) <sup>c</sup>	3
MA 411 Senior Seminars (General Education Capstone) <sup>3, c2</sup>	3	MA Elective (300-400 level)	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3

Fall Semester Total Cr.:	15		Spring Semester Total Cr.:	15
TOTAL CREDITS FOR THIS MAJOR: 124-126				

- 2 MA 303 and MA 309 alternate as fall semester courses; both courses are required. For years these courses are offered, see Course Descriptions.
- 3 Students must take either MA 419 or MA 411 with an approved project on an actuarial science topic.
- b Grade of B- or higher to meet the Society of Actuaries Validation by Educational Experience requirement.
- c Grade of C or higher required.
- c1 Grade of C or higher required in 3 of the 4 courses.
- c2 Grade of C or higher in at least 6 Math courses at the 300/400 level (other than MA 360)