

# Mathematics Major with Actuarial Concentration

## B.S. in Mathematics-Actuarial Science Concentration - Curriculum Map 2016-2017 Catalog

<b>Freshman</b>			
<b>Fall</b>	<b>Cr.</b>	<b>Spring</b>	<b>Cr.</b>
EN 101 Composition and Literature I	3	EN 102 Composition and Literature II	3
General Education History <sup>1</sup>	3	General Education Lab Science	4
General Education Lab Science	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
<b>Semester Total Credits</b>	<b>14</b>	<b>Semester Total Credits</b>	<b>14</b>
<b>Sophomore</b>			
<b>Fall</b>	<b>Cr.</b>	<b>Spring</b>	<b>Cr.</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	3	MA 310 Linear Algebra	3
PS 211 University Physics I	4	PS 212 University Physics II	4
<b>Semester Total Credits</b>	<b>17</b>	<b>Semester Total Credits</b>	<b>17</b>
<b>Junior</b>			
<b>Fall</b>	<b>Cr.</b>	<b>Spring</b>	<b>Cr.</b>
General Education Arts & Humanities	3	MA 312 Statistical Methodology II <sup>b,c</sup>	3
MA 212 Finite Mathematics <sup>c</sup>	3	Mathematics Elective	3
MA 303 Advanced Calculus I or 309 Algebraic Structures <sup>2</sup>	3	Mathematics Elective	3
MA 311 Statistical Methodology <sup>b,c</sup>	3	PH 303 Survey of Ethics or 350 Medical Ethics (General Education Ethics)	3
Free Elective	3	Free Elective	3
		MA 250 Communication in Mathematics	1
<b>Semester Total Credits</b>	<b>15</b>	<b>Semester Total Credits</b>	<b>16</b>
<b>Senior</b>			
<b>Fall</b>	<b>Cr.</b>	<b>Spring</b>	<b>Cr.</b>
MA 309 Algebraic Structures or 303 Advanced Calculus I <sup>2</sup>	3	MA 321 Financial Mathematics <sup>c</sup>	3
MA 411 Senior Seminars	3	Mathematics Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
<b>Semester Total Credits</b>	<b>15</b>	<b>Semester Total Credits</b>	<b>15</b>
<b>Total Credits For This Major: 123</b>			

<sup>2</sup> MA 303 and MA 309 alternate as fall semester courses; both courses are required. For years these courses are offered, see Course Descriptions.

<sup>b</sup> Grade of B- or higher to meet the Society of Actuaries Validation by Educational Experience requirement.

<sup>c</sup> Grade of C or higher required.

<sup>c1</sup> Grade of C or higher required in 3 of the 4 courses.