

Mathematics Major with Actuarial Concentration

B.S. in Mathematics-Actuarial Science Concentration - Curriculum Map 2017-2018 Catalog

Freshman			
Fall	Cr.	Spring	Cr.
EN 101 Composition and Literature I	3	EN 102 Composition and Literature II	3
General Education History ¹	3	General Education Lab Science	4
General Education Lab Science	4	MA 122 Calculus II (General Education Math) ^{c1}	4
MA 121 Calculus I (General Education Math) ^{c1}	4	MA 241 Mathematical Computation and Modeling	3
Semester Total Credits	14	Semester Total Credits	14
Sophomore			
Fall	Cr.	Spring	Cr.
EC 201 Principles of Economics (Macro) (General Education Social Science) ^{b,c}	3	EC 202 Principles of Economics (Micro) ^{b,c}	3
EN 201 World Literature I (General Education Literature)	3	EN 202 World Literature II	3
MA 223 Calculus III ^{c1}	4	MA 224 Differential Equations ^{c1}	4
MA 306 Discrete Mathematics	3	MA 310 Linear Algebra	3
PS 211 University Physics I	4	PS 212 University Physics II	4
Semester Total Credits	17	Semester Total Credits	17
Junior			
Fall	Cr.	Spring	Cr.
General Education Arts & Humanities	3	MA 312 Statistical Methodology II ^{b,c}	3
MA 303 Advanced Calculus I or 309 ²	3	Mathematics Elective	3
MA 311 Statistical Methodology ^{b,c}	3	MA 419 Internship in Mathematics or Mathematics Elective ³	3
Free Elective	3	PH 303 Survey of Ethics or 350 (General Education Ethics)	3
Mathematics Elective	3	Free Elective	3
		MA 250 Communication in Mathematics	1
Semester Total Credits	15	Semester Total Credits	16
Senior			
Fall	Cr.	Spring	Cr.
MA 309 Algebraic Structures or 303 ²	3	MA 321 Financial Mathematics ^c	3
MA 411 Senior Seminars (General Education Capstone) ³	3	Mathematics Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
Semester Total Credits	15	Semester Total Credits	15
Total Credits For This Major: 123			

- 1 This may be any history course except HI 209.
- 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.