MATHEMATICS MAJOR
Actuarial Science Emphasis (BA/BS) (40 units)
Effective beginning Fall 2021
An approved minor is required for this major

For students interested in a career as an actuary.

COURSES			OFFERED*	PRE-REQUISITE
Major Requirements:				
MATH 200	1 unit	Mathematics: Form and Function	S	CoReq: MATH 253
MATH 253	5 units	Calculus and Analytic Geometry I (GQ)	E	MATH 152 or (MATH 142 and 151) each with C or better
MATH 254	4 units	Calculus and Analytic Geometry II	E	MATH 253 or (MATH 250 and 151) or (MATH 250 and 152) each with C or better
MATH 255	4 units	Calculus and Analytic Geometry III	E	MATH 254 with C or better
MATH 280	3 units	Discrete Mathematics	E	MATH 250 with B or better or MATH 253 with C or better
MATH 301	3 units	Introduction to Analysis	E	MATH 254 with C or better and MATH 280
MATH 343	3 units	Applied Probability Theory	F	MATH 250 or 253 with C or better
MATH 346	3 units	Theory of Interest	S	MATH 254 with C or better
MATH 355	3 units	Matrices and Linear Algebra	E	MATH 253 or (MATH 250 and 151) or (MATH 250 and 152) each with C or better
MATH 442	4 units	Mathematical Statistics	S	MATH 255 with C or better and MATH 343 with C or better
STAT 263	1 unit	Introduction to R	E	CoReq: MATH 250 or MATH 253
STAT 342	3 units	Applied Statistics	E	MATH 250 or 253 with C or better and STAT 263, CS 172, or CS 174
STAT 420	3 units	Applied Regression Analysis	F	STAT 342 or consent of instructor
Unique Computer Science Requirement (3 units) — select one of the following:				
COMPSCI 170	3 units	Introduction to Python Programming		
COMPSCI 172	3 units	Introduction to JAVA (GM)		
COMPSCI 174	3 units	Introduction to C++ (GM)		
COMPSCI 220	3 units	Intermediate JAVA		
COMPSCI 222	3 units	Intermediate C++		
COMPSCI 347	3 units	Scientific Computing		
Unique Writing Requirement (3 units) — select one of the following:				
ENGLISH 370	3 units	Advanced Composition		
PWP 371	3 units	Writing in the Sciences		
PWP 372	3 units	Technical and Scientific Writing		

MILESTONES
Math Exit Interview
GPA Requirement of 2.0

---

* E = Every Semester
S = Every Spring
F = Every Fall
R = On Rotation; semester offerings will vary