

# MATHEMATICS MAJOR: CONCENTRATION IN ACTUARIAL STUDIES

## Admission Requirements for the Mathematics Major

Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

## Requirements for Mathematics Major: Concentration in Actuarial Studies

### Core Courses Math Major: 22 credits (including Ancillary)

Code	Title	Credits
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3
<b>Total Credits</b>		<b>22</b>

### Requirements for the Concentration in Actuarial Sciences: 19 credits

Code	Title	Credits
MA-302	Probability and Statistics	3
MA-303	Mathematical Modeling	3
MA-304	Data Analysis	4
MA-380	Probability	3
MA-382	Actuarial Preparation Workshop	3
MA-425	Mathematical Statistics	3
<b>Total Credits</b>		<b>19</b>

### Ancillary Requirements: 30 credits

Code	Title	Credits
EC-110	Introduction to Microeconomics	3
EC-120	Introduction to Macroeconomics	3
EC-200	Intermediate Macroeconomics	3
EC-201	Intermediate Microeconomics	3
BA-210	Financial Accounting I	3
BA-220	Financial Accounting II	3
BA-316	Financial Management	3
BA-404	Corporate Finance	3
CS-265	Database Applications	3
CS-135	Programming for Non-CS Majors	3
<b>Total Credits</b>		<b>30</b>

### Total Credits: 71

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

## Department of Mathematics: Mathematics Major Concentration in Actuarial Sciences Sample Timeline for Completion of Degree

Year One		
Semester One		Credits
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3
EC-110	Introduction to Microeconomics	3
EN-101	College Writing I	3
LASC	First-Year Seminar (FYS)	3
<b>Credits</b>		<b>16</b>
Semester Two		Credits
MA-201	Calculus II	4
MA-240	Theory of Proof	4
EC-120	Introduction to Macroeconomics	3
EN-102	College Writing II	3
LASC	LASC Elective (CON)	3
<b>Credits</b>		<b>17</b>
Year Two		
Semester Three		Credits
MA-310	Calculus III	4
MA-302	Probability and Statistics	3
BA-210	Financial Accounting I	3
LASC	LASC Elective (CA)	3
LASC	LASC Elective (USW)	3
<b>Credits</b>		<b>16</b>
Semester Four		Credits
MA-304	Data Analysis	4
MA-382	Actuarial Preparation Workshop	3
BA-220	Financial Accounting II	3
LASC	LASC Elective (NSP)	3
LASC	LASC Elective (GP)	3
<b>Credits</b>		<b>16</b>
Year Three		
Semester Five		Credits
MA-380	Probability	3
MA-260	Linear Algebra	3
CS-265	Database Applications	3
LASC	LASC Elective (TLC)	3
LASC	LASC Elective (NSP LAB)	4
<b>Credits</b>		<b>16</b>
Semester Six		Credits
MA-303	Mathematical Modeling	3
EC-200	Intermediate Macroeconomics	3
BA-316	Financial Management	3
LASC	LASC Elective (ICW)	3
LASC	LASC Elective (HBS)	3
<b>Credits</b>		<b>15</b>
Year Four		
Semester Seven		Credits
MA-470	Capstone Experience	3
EC-201	Intermediate Microeconomics	3
LASC	LASC Elective (DIV)	3

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SELECT	General Elective	3
<b>Credits</b>		<b>12</b>
<b>Semester Eight</b>		
BA-404	Corporate Finance	3
MA-425	Mathematical Statistics	3
SELECT	General Elective	3
SELECT	General Elective	3
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>120</b>