

# Applied Mathematics — Actuarial Science Option (ACTU)

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## Freshman

Fall	Hours	Spring	Hours
ENGL 1100 English Composition I		3 ENGL 1120 English Composition II	3
Core History		3 Core Science <sup>3</sup>	4
Core Social Science		3 Core History or Literature <sup>1</sup>	3
Core Humanities		3 COMP 1200 Introduction to Computing for Engineers and Scientists	2
<b>MATH 1610 Calculus I</b>		<b>4 MATH 1620 Calculus II</b>	<b>4</b>
	<b>16</b>		<b>16</b>

## Sophomore

Fall	Hours	Spring	Hours
Core Science <sup>3</sup>		4 Core Social Science or Humanities <sup>2</sup>	3
ECON 2020 Principles of Microeconomics		3 ECON 2030 Principles of Macroeconomics	3
<b>MATH 2630 Calculus III</b>		<b>4 MATH 2650 Linear Differential Equations</b>	<b>3</b>
<b>MATH 2660 Topics in Linear Algebra</b>		<b>3 MATH 4790 Actuarial Seminar in the Mathematics of Finance</b>	<b>3</b>
MATH 2790 Mathematics of Interest Theory		3 STAT 3600 Probability and Statistics I	3
	<b>17</b>		<b>15</b>

## Junior

Fall	Hours	Spring	Hours
Core Literature		3 FINC 3610 Principles of Business Finance	3
Electives		3 Electives	4
ACCT 2810 Fundamentals Of Accounting		3 MATH 4800 Introduction to Actuarial Mathematics	3
MATH 4820 Actuarial Seminar in Probability		3 MATH 3100 Introduction to Advanced Mathematics	3
STAT 3610 Probability and Statistics II		3 Core Fine Arts	3
	<b>15</b>		<b>16</b>

## Senior

Fall	Hours	Spring	Hours
<b>MATH 5000 Math Modeling Continuous</b>		<b>3 MATH 5810 Actuarial Mathematics II</b>	<b>4</b>
<b>MATH 5800 Actuarial Mathematics I</b>		<b>3 Math Electives<sup>4</sup></b>	<b>3</b>
Electives		3 Electives	6
<b>Math Elective<sup>4</sup></b>		<b>3 UNIV 4AA0 Achieve the Creed</b>	<b>0</b>
	<b>12</b>		<b>13</b>

**Total Hours: 120**

<sup>1</sup> Students must complete a two-course sequence in either HIST or LIT (for example, World History 1 and 2 or American Lit 1 and 2). For complete HIST and LIT sequence options, see the *Bulletin*.

<sup>2</sup> If a LIT sequence is chosen, this course must be a CORE SOC SCI. If a HIST sequence is chosen, this course must be CORE HUMANITIES.

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3 Core Science: One of the sequences PHYS 1600/PHYS 1610, BIOL 1020/BIOL 1030, CHEM 1030/CHEM 1040 with labs, or GEOL 1100/GEOL 1110.

4 MATH or STAT courses at the 3000 level or higher; no more than one 3000-level course. Subject to advisor's approval.