

# Applied Mathematics Option (AMTH)

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## Freshman

Fall	Hours	Spring	Hours
ENGL 1100 English Composition I		3 ENGL 1120 English Composition II	3
Core Humanities		3 Core Science <sup>4</sup>	4
Core Social Science <sup>2</sup>		3 Core History or Literature <sup>1</sup>	3
Core History		3 <b>MATH 1620 Calculus II</b>	4
<b>MATH 1610 Calculus I</b>		4 COMP 1220 Introduction to Computing with Python or 1230 Introduction to Computing with MATLAB	2
	<b>16</b>		<b>16</b>

## Sophomore

Fall	Hours	Spring	Hours
Core Literature		3 Core Social Science or Humanities <sup>3</sup>	3
Core Science <sup>4</sup>		4 <b>MATH 2650 Linear Differential Equations</b>	3
<b>MATH 2630 Calculus III</b>		4 <b>MATH 3100 Introduction to Advanced Mathematics</b>	3
<b>MATH 2660 Topics in Linear Algebra</b>		3 STAT 3600 Probability and Statistics I	3
Interdisciplinary Electives <sup>5</sup>		3 Interdisciplinary Elective <sup>5</sup>	3
	<b>17</b>		<b>15</b>

## Junior

Fall	Hours	Spring	Hours
Core Social Science <sup>2</sup>		3 Core Fine Arts	3
<b>MATH 5200 Analysis I</b>		3 <b>MATH 5210 Analysis II</b>	3
<b>MATH 5630 Introduction to Numerical Analysis I</b>		3 <b>MATH 5640 Introduction to Numerical Analysis II</b>	3
Interdisciplinary Elective <sup>5</sup>		3 Interdisciplinary Elective <sup>5</sup>	3
Electives		4 Elective	4
	<b>16</b>		<b>16</b>

## Senior

Fall	Hours	Spring	Hours
<b>MATH 5000 Math Modeling Continuous</b>		3 <b>Math Elective<sup>5</sup></b>	9
<b>MATH 5670 Probability and Stochastic Processes I</b>		3 Elective	3
<b>Math Elective<sup>5</sup></b>		3 UNIV 4AA0 Achieve the Creed <sup>6</sup>	0
Interdisciplinary Elective <sup>5</sup>		3	
	<b>12</b>		<b>12</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> Students who choose a HIST sequence other than HIST 1010 and HIST 1020 should talk to an advisor about CORE SOC SCI choices.

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3 If a LIT sequence is chosen, this course must be a CORE SOC SCI. If a HIST sequence is chosen, this course must be a CORE HUMANITIES.

4 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.

5 For guidelines regarding Math Elective and Interdisciplinary Elective, see advisor.

6 This course must be taken the semester of graduation.