

# Applied Mathematics Option

M 171Q	Calculus I	4
or M 181Q	Honors Calculus I	
M 172Q	Calculus II	4
or M 182Q	Honors Calculus II	
M 221	Introduction to Linear Algebra	3
M 242	Methods of Proof	3
M 273Q	Multivariable Calculus	4
or M 283Q	Honors Multivariable Calculus	
M 274	Introduction to Differential Equation	4
or M 284	Honors Introduction to Differential Equations	
M 383	Introduction to Analysis I	3
M 384	Introduction to Analysis II	3
M 386R	Software Applications in Mathematics	3
M 441	Numerical Linear Algebra & Optimization	3
Choose six from the following math or statistics electives: *		18
M 333	Linear Algebra	
M 348	Techniques of Applied Math I	
M 349	Techniques of Applied Mathematics II	
M 430	Mathematical Biology	
M 431	Abstract Algebra I	
M 442	Numerical Solution of Differential Equations	
M 450	Applied Mathematics I	
M 451	Applied Mathematics II	
M 454	Introduction of Dynamical Systems I	
M 455	Introduction to Dynamical Systems II	
M 472	Introduction to Complex Analysis	
M 476	Introduction to Topology	
STAT 332	Statistics for Scientists and Engineers	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
PHSX 220	Physics I (w/ calculus) **	4
PHSX 222	Physics II (w/ calculus) **	4
Total Credits		60

\* At least nine credits must be 400 level.

\*\* may be replaced with another mathematical application area with advisor approval.

A minimum of 120 credits is required for graduation; 42 of these credits must be in courses numbered 300 and above. Core 2.0 must be completed for graduation.

Freshman Year	Credits	
	Fall	Spring
CLS 101US - Knowledge and Community or COMX 111US - Introduction to Public Speaking	3	
M 171Q - Calculus I or M 181Q - Honors Calculus I	4	
PHSX 220 - Physics I (w/ calculus)	4	
University Core and Electives	4	

WRIT 101W - College Writing I	3	
M 172Q - Calculus II or M 182Q - Honors Calculus II	4	
PHSX 222 - Physics II (w/ calculus)	4	
University Core and Electives	4	
Year Total:	15	15
<b>Sophomore Year</b>		<b>Credits</b>
	<b>Fall</b>	<b>Spring</b>
M 221 - Introduction to Linear Algebra	3	
M 273Q - Multivariable Calculus or M 283Q - Honors Multivariable Calculus	4	
University Core and Electives	8	
M 274 - Introduction to Differential Equation or M 284 - Honors Introduction to Differential Equations		4
M 242 - Methods of Proof		3
University Core and Electives		8
Year Total:	15	15
<b>Junior Year</b>		<b>Credits</b>
	<b>Fall</b>	<b>Spring</b>
M 383 - Introduction to Analysis I	3	
Math or Stat Elect (See List Above)	6	
University Core and Electives	6	
M 384 - Introduction to Analysis II		3
M 386R - Software Applications in Mathematics		3
Math or Stat Elect (See List Above)		3
University Core and Electives		6
Year Total:	15	15
<b>Senior Year</b>		<b>Credits</b>
	<b>Fall</b>	<b>Spring</b>
M 441 - Numerical Linear Algebra & Optimization	3	
Math or Stat Elect (See List Above)	3	
University Core and Electives	9	
Math or Stat Elect (See List Above)		6
University Core and Electives		9
Year Total:	15	15
Total Program Credits:		120

### **Font Notice**

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.