

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 348 | Techniques of Applied Math I | 3 |
| M 349 | Techniques of Applied Mathematics II | 3 |
| M 386R | Software Applications in Mathematics | 3 |
| M 441 | Numerical Linear Algebra & Optimization | 3 |
| M 442 | Numerical Solution of Differential Equations | 3 |
| STAT 332 | Statistics for Scientists and Engineers | 3 |
| Choose four from the following math or statistics electives: * | | 12 |
| M 330 | History of Mathematics | |
| M 333 | Linear Algebra | |
| M 383 | Introduction to Analysis I | |
| M 384 | Introduction to Analysis II | |
| M 430 | Mathematical Biology | |
| M 431 | Abstract Algebra I | |
| 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 | |
| STAT 421 | Probability Theory | |
| STAT 422 | Mathematical Statistics | |
| PHSX 220 | Physics I (w/ calculus) | 4 |
| PHSX 222 | Physics II (w/ calculus) ** | 4 |
| PHSX 224 | Physics III ** | 4 |
| Total Credits | | 64 |

* Six of these 12 credits must be from M 430, M 450, M 451, M 454, M 455.

** PHSX 220, PHSX 222, and PHSX 224 are required. However, with the agreement of the student's advisor, PHSX 224 may be replaced by PHSX 301, or both PHSX 222 and PHSX 224 may be replaced by a two-course sequence in another mathematical application area.

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 COM 110US - | 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 |
| Sophomore Year | | Credits |
| | Fall | Spring |
| M 221 - Introduction to Linear Algebra | 3 | |
| M 273Q - Multivariable Calculus or M 283Q - Honors Multivariable Calculus | 4 | |
| PHSX 224 - Physics III | 4 | |
| University Core and Electives | 4 | |
| 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 |
| Junior Year | | Credits |
| | Fall | Spring |
| M 348 - Techniques of Applied Math I | 3 | |
| STAT 332 - Statistics for Scientists and Engineers | 3 | |
| Math or Stat Elect (See List Above) | 3 | |
| University Core and Electives | 6 | |
| M 349 - Techniques of Applied Mathematics 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 |
| Senior Year | | Credits |
| | Fall | Spring |
| M 441 - Numerical Linear Algebra & Optimization | 3 | |
| Math or Stat Elect (See List Above) | 3 | |
| University Core and Electives | 9 | |
| M 442 - Numerical Solution of Differential Equations | | 3 |
| Math or Stat Elect (See List Above) | | 3 |
| 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.