

# Honors Applied Mathematics Requirements (66)

## Foundation Courses

- CMPUT 174 - Introduction to the Foundations of Computation I (See Note 1)
- CMPUT 175 - Introduction to the Foundations of Computation II (See Note 1)

### 3 units from:

- MATH 117 - Honors Calculus I
- MATH 134 - Calculus for the Life Sciences I
- MATH 144 - Calculus for the Mathematical and Physical Sciences I \_\_\_\_\_
- MATH 154 - Calculus for Business and Economics I

### 3 units from:

- MATH 118 - Honors Calculus II
- MATH 136 - Calculus for the Life Sciences II
- MATH 146 - Calculus for the Mathematical and Physical Sciences II \_\_\_\_\_
- MATH 156 - Calculus for Business and Economics II

### 3 units from:

- MATH 125 - Linear Algebra I
- MATH 127 - Honors Linear Algebra I \_\_\_\_\_

- COMM
- COMM
- IND
- BO\_\_
- BO\_\_
- BSBS
- BSFS
- BSSS
- LAB

## Senior Courses

- MATH 216 - Introduction to Analysis (See Note 2)
- MATH 217 - Honors Calculus III
- MATH 226 - Algebraic Structures (See Note 3)
- MATH 317 - Honors Calculus IV
- MATH 336 - Honors Ordinary Differential Equations
- MATH 337 - Introduction to Partial Differential Equations
- MATH 381 - Numerical Methods
- MATH 411 - Honors Complex Variables
- MATH 417 - Real Analysis
- MATH 436 - Intermediate Partial Differential Equations
- MATH 499 - Research Project
- STAT 265 - Probability and Statistics I

### 3 units from:

- MATH 225 - Linear Algebra II
- MATH 227 - Honors Linear Algebra II \_\_\_\_\_

### 3 units from:

- MATH 327 - Algebra I
- MA PH 364 - Group Theory in Physics \_\_\_\_\_

### 3 units from:

- MATH 371 - Mathematical Modelling in the Life Sciences
- MATH 372 - Mathematical Modelling \_\_\_\_\_

### 3 units from:

- MATH or MA PH at the 300-level \_\_\_\_\_

### 3 units from:

- MATH or MA PH at the 400-level \_\_\_\_\_

**Notes:**

1. CMPUT 274 and CMPUT 275 can serve as substitutes for CMPUT 174 and CMPUT 175, respectively.
2. Students who successfully complete MATH 117 must replace MATH 216 with 3 units selected from MATH at the 200-level or higher.
3. Students who complete MATH 127 and MATH 227 can replace MATH 226 with 3 units selected from any 200-, 300-, and 400-level MATH course.
4. With consent of the Department, students may substitute MATH 100 for MATH 117, MATH 134, MATH 144 or MATH 154; MATH 101 for MATH 118, MATH 136, MATH 146 or MATH 156; MATH 102 for MATH 125 or MATH 127.
5. Several of the required courses, including MATH 411, may only be offered in alternate years.
6. ECON 299, ECON 386 or ECON 387 may not be used for credit in any Honors degree offered by the Department of Mathematical and Statistical Sciences.