

# UNIVERSITY OF WATERLOO

**Fall 2008**

## Ontario Secondary School Grade 12 Required Mathematics Courses

1. The University of Waterloo recommends that students wait and take the appropriate mathematics courses when they are in grade 12.
2. The University of Waterloo will recognize each of MCB4U, MGA4U, MHF4U, and MCV4U as a separate earned credit.

Listed below is a guideline of the required mathematics courses for UW programs:

<b>Fall 2008 current Ontario Secondary School Grade 12 (4U) required mathematics Courses</b>	
<b>Faculty of Applied Health Sciences</b>	
Honours Kinesiology - Regular or Co-op	Advanced Functions (MHF4U)  OR  Advanced Functions and Introductory Calculus (MCB4U)
<b>Faculty of Engineering</b>	
Architecture - Co-op	Calculus and Vectors (MCV4U), and <b>one</b> of Advanced Functions (MHF4U) or Advanced Functions and Introductory Calculus (MCB4U)  OR  Advanced Functions and Introductory Calculus (MCB4U) and <b>one</b> of Geometry and Discrete Mathematics (MGA4U), or Calculus and Vectors (MCV4U)
Chemical Engineering - Co-op, Civil Engineering - Co-op, Computer Engineering - Co-op, Electrical Engineering - Co-op, Environmental Engineering - Co-op, Geological Engineering - Co-op, Management Engineering - Co-op, Mechanical Engineering - Co-op, Mechatronics Engineering - Co-op, Nanotechnology Engineering - Co-op, Systems Design Engineering - Co-op	Calculus and Vectors (MCV4U), and <b>one</b> of Advanced Functions (MHF4U) or Advanced Functions and Introductory Calculus (MCB4U)  OR  Advanced Functions and Introductory Calculus (MCB4U) and <b>one</b> of Geometry and Discrete Mathematics (MGA4U), Mathematics of Data Management (MDM4U), or Calculus and Vectors (MCV4U)
<b>Offered jointly by the Faculties of Engineering and Mathematics</b>	
Software Engineering - Co-op	Calculus and Vectors (MCV4U), and <b>one</b> of Advanced Functions (MHF4U) or Advanced Functions and Introductory Calculus (MCB4U)  OR  Advanced Functions and Introductory Calculus (MCB4U) and <b>one</b> of Geometry and Discrete Mathematics (MGA4U) or Calculus and Vectors (MCV4U)

**CONTINUED - Fall 2008 current Ontario Secondary School Grade 12 (4U) required mathematics Courses**

**Faculty of Environmental Studies**

Honours Geography and Aviation - Regular

**One** of Advanced Functions (MHF4U), Calculus and Vectors (MCV4U), Mathematics of Data Management (MDM4U), Advanced Functions and Introductory Calculus (MCB4U), or Geometry and Discrete Mathematics (MGA4U)

Honours Geomatics - Regular or Co-op

**One** of Advanced Functions (MHF4U), Calculus and Vectors (MCV4U), Mathematics of Data Management (MDM4U), Advanced Functions and Introductory Calculus (MCB4U), or Geometry and Discrete Mathematics (MGA4U)

Honours Knowledge Integration - Regular

**One** of Advanced Functions (MHF4U), Advanced Functions and Introductory Calculus (MCB4U), or Geometry and Discrete Mathematics (MGA4U)

**Faculty of Mathematics**

Honours Computational Mathematics - Regular or Co-op,  
 Honours Computer Science - Regular or Co-op,  
 Honours Mathematics - Regular or Co-op,  
 Honours Mathematics/Chartered Accountancy - Co-op,  
 Honours Mathematics/Business - Regular or Co-op,  
 Honours Mathematics/Financial Analysis and Risk -  
 Regular or Co-op  
 Honours Business Administration and  
 Mathematics - Co-op,  
 Honours Bioinformatics - Regular or Co-op

Calculus and Vectors (MCV4U), and **one** of Advanced Functions (MHF4U) or Advanced Functions and Introductory Calculus (MCB4U)  
  
 OR  
  
 Advanced Functions and Introductory Calculus (MCB4U) and **one** of Geometry and Discrete Mathematics (MGA4U) or Calculus and Vectors (MCV4U)

**Offered jointly by the Faculties of Arts and Mathematics**

Computing and Financial Management - Co-op

Calculus and Vectors (MCV4U), and **one** of Advanced Functions (MHF4U) or Advanced Functions and Introductory Calculus (MCB4U)  
  
 OR  
  
 Advanced Functions and Introductory Calculus (MCB4U) and **one** of Geometry and Discrete Mathematics (MGA4U) or Calculus and Vectors (MCV4U)

**Faculty of Science**

Honours Biotechnology/Chartered Accountancy - Co-op,  
 Honours Biotechnology/Economics - Co-op,  
 Honours Science - Regular,  
 Honours Life Science - Regular or Co-op,  
 Honours Physical Science - Regular or Co-op,  
 Honours Science and Aviation - Regular,  
 Honours Science and Business - Regular or Co-op

Advanced Functions (MHF4U) and Calculus and Vectors (MCV4U)  
  
 OR  
  
 Advanced Functions and Introductory Calculus (MCB4U)