

MATHEMATICS, B.SC. MAJOR

Degree Requirements

Four Year Major (Including Co-operative Option if Selected)

Course	Title	Hours
Year 1		
MATH 1220	Linear Algebra 1 ¹	3
MATH 1230	Differential Calculus ¹	3
MATH 1232	Integral Calculus (C+) ¹	3
MATH 1240	Elementary Discrete Mathematics	3
Hours		12
Years 1-2		
STAT 1150	Introduction to Statistics and Computing ¹	3
COMP 1010	Introductory Computer Science 1 ¹	3
15 credit hours of approved electives		15
The following must be completed in Year 1 or Year 2:		
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
Hours		27
Year 2		
MATH 2020	Algebra 1	3
MATH 2080	Introduction to Analysis	3
MATH 2090	Linear Algebra 2	3
MATH 2150	Multivariable Calculus	3
MATH 2180	Real Analysis 1	3
6 credit hours from the following:		6
MATH 2030	Combinatorics 1	
MATH 2040	Curves and Surfaces	
MATH 2070	Graph Theory 1	
MATH 2160	Numerical Analysis 1	
MATH 2170	Number Theory 1	
Hours		21
Years 3-4		
48 credit hours from the following:		48
MATH 2030	Combinatorics 1	
MATH 2070	Graph Theory 1	
MATH 2160	Numerical Analysis 1	
MATH 2170	Number Theory 1	
and any 3000/4000 level Mathematics courses, which must include:		
MATH 2030	Combinatorics 1 (if not already taken as Year 2 elective)	
MATH 2160	Numerical Analysis 1 (if not already taken as Year 2 elective)	
MATH 3320	Algebra 2	
MATH 3340	Complex Analysis 1	
MATH 3360	Combinatorics 2	
MATH 3390	Introduction to Topology	
MATH 3440	Ordinary Differential Equations	
MATH 3460	Partial Differential Equations	
12 credit hours of approved electives		12

Co-op Requirements (if selected):

SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if a 4th work term is selected)	0
Hours		60
Total Hours		120

¹ Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232.

The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved:

- MATH 1210 (B) or MATH 1300 (C+) in place of MATH 1220,
- MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230,
- MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232,
- MATH 1690 (C+) in place of MATH 1230 and MATH 1232.

With permission from the department, students may be able to substitute STAT 1000 and STAT 2000 in place of STAT 1150. COMP 1012 may be used in lieu of COMP 1010.

(Letters in brackets indicate minimum prerequisite standing for further study.)