Mathematics: Associate of Science Degree

Faculty of Science and Horticulture	
kwantlen.ca/science	
IMPLEMENTATION DATE	**START DATE(S)**
01-Sep-2011	September January May
ADMISSION TYPE	**ENROLMENT TYPE**
Open admission	Open access
PROGRAM TYPE	**CREDENTIAL GRANTED**
Undergraduate	Associate Degree
OFFERED AT	**FORMAT**
Richmond Surrey	Full-time Part-time
HOW TO APPLY	
www.kwantlen.ca/admission	

DESCRIPTION

The Associate Degree is designed to provide an educational experience that prepares students for work, citizenship and an enriched life as an educated person, and to lay a solid foundation for further study in the field of Mathematics.

PROGRAM ADMISSION REQUIREMENTS

General university admission requirements apply to this program including the undergraduate-level English Proficiency Requirement.

CONTENT

Within the framework of the Associate of Science degree, you must complete at least 60 credits with a minimum overall GPA of 2.0 and a minimum passing grade (D or better) in each course:

First Year Science Requirements

All of:

CPSC 1103	Introduction to Computer Programming I	3 credits
CPSC 1204	Introduction to Computer Programming II	3 credits

And four more first year science courses from the following:

BIOL 1110	Introductory Biology I	4 credits
BIOL 1210	Introductory Biology II	4 credits
CHEM 1105*	Introductory Chemistry	4 credits
CHEM 1110	The Structure of Matter	4 credits
CHEM 1210	Chemical Energetics and Dynamics	4 credits
CPSC 1100	Introduction to Computer Literacy	3 credits
GEOG 1110	Introduction to the Atmosphere	3 credits
GEOG 1120	Introduction to Earth Science	3 credits
MATH 1112*	Pre-Calculus Algebra	3 credits
MATH 1115	Statistics I	3 credits
PHYS 1100*	Introductory Physics	4 credits
PHYS 1102	Physics for Life Sciences II	4 credits

Or either of:

PHYS 1101	Physics for Life Sciences I	4 credits
PHYS 1120	Physics for Physical and Applied Sciences I	4 credits

Or either of:

PHYS 1170	Mechanics I	3 credits
PHYS 1220	Physics for Physical and Applied Sciences II	4 credits

Notes:

* Students intending to transfer to a BSc should confirm transferability.

Second Year Science Requirements

Four second year Math courses chosen from:

MATH 2232	Linear Algebra	3 credits
MATH 2315	Probability and Statistics	3 credits
MATH 2321	Multivariate Calculus (Calculus III)	3 credits
MATH 2331	Introduction to Analysis	3 credits
MATH 2335	Statistics for Life Sciences	3 credits
MATH 3322	Vector Calculus (Calculus IV)	3 credits
MATH 3421	Ordinary Differential Equations	3 credits

And two more second year science courses chosen from:

BIOL 2320	Genetics	4 credits
BIOL 2321	Cell Biology	4 credits
BIOL 2322	Ecology	4 credits
BIOL 2330	Microbiology	4 credits
BIOL 2421	Cellular Biochemistry	3 credits
CHEM 2311	Physical Chemistry for Life Sciences	3 credits
CHEM 2315	Analytical Chemistry	4 credits
CHEM 2410	Physical-Inorganic Chemistry	5 credits
CHEM 3310	Physical Chemistry	4 credits
CPSC 2405	Introduction to Discrete Mathematics I	3 credits
GEOG 2310	Climatology	3 credits
GEOG 2320	Geomorphology	3 credits

In the event of a discrepency between this document and the official Kwantlen 2011-12 Calendar (available at www.kwantlen.ca/calendar/2011-12), the official calendar shall be deemed correct.

2011-12 Calendar   **www.kwantlen.ca/calendar/2011-12**

GEOG 2330	Introduction to Hydrology	3 credits
GEOG 2390	Geographic Information and Data Analysis	3 credits
GEOG 2395	Cartographic Techniques	3 credits
PHYS 2101	Experimental Physics I	2.5 credits
PHYS 2201	Experimental Physics II	2.5 credits
PHYS 2330	Intermediate Mechanics	3 credits
PHYS 2420	Intermediate Electricity and Magnetism	3 credits
PHYS 2421	Laboratory in Electric Circuits	2 credits
PHYS 2424	Relativity and Quanta	3 credits

GRADUATION

Upon successful completion of this program, students are eligible to receive an **Associate of Science Degree in Mathematics**.

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2011-12 Calendar

www.kwantlen.ca/calendar/2011-12