

General Science: Associate of Science Degree

Faculty of Science and Horticulture	kwantlen.ca/science
Implementation Date	01-Sep-2011
Start Date(s)	September January May
Admission Type	Open admission
Enrolment Type	Open enrolment
Program Type	Undergraduate
Credential Granted	Associate Degree
Offered At	Richmond Surrey
Format	Full-time Part-time
How to Apply	www.kwantlen.ca/admission

DESCRIPTION

The Associate of Science in General Science is tailored for students who are uncertain of the major they wish to complete, or who wish to follow an articulated pathway to a specific degree at a specific institution (see Articulated Options below).

For those uncertain, students should be careful in selecting this option because while it is recognized as half way to completing a Bachelor of Science degree, it does not necessarily reflect all lower level courses required for a specified field of science (biology, chemistry, geography, mathematics, physics, psychology) they may choose to pursue later. Generally, Year 1 is common at all universities, but variations could begin as early as Year 2. It is therefore advisable that you verify the course requirements for Year 1 and Year 2 with an Educational Advisor or with the university at which you wish to complete your Bachelor of Science degree (referred to as the receiving university).

For your convenience, a list of required lower level courses by BC universities can be found under the heading "suggested options" at Kwantlen's Science website: kwantlen.ca/science/associate. Care is taken to keep this list current, but it is always wise to verify accuracy.

Articulated Options

Aside from the foregoing areas of specialization, three other options have been articulated within the Associate of Science in General Science.

A. BBA IN ENTREPRENEURIAL LEADERSHIP AT KWANTLEN POLYTECHNIC UNIVERSITY

This option allows Science students with an Associate of Science degree to apply to enter directly into the third year of Kwantlen's Bachelor of Business Administration (BBA) in Entrepreneurial Leadership. This four-year package (2-year A.Sc.; 2-year BBA) provides a solid foundation in science while pursuing a degree in Business at Kwantlen Polytechnic University.

A degree with this focus can be very beneficial in business or industry involving the manufacture and sale of scientific and technology products, or for working in industries involved heavily

with health research (e.g., pharmaceutical companies, hospitals, biological corporations).

B. BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE OR ENVIRONMENTAL MANAGEMENT AT ROYAL ROADS UNIVERSITY

This option allows Science students with an Associate of Science degree to apply to enter directly into the third year of a B.Sc. in Environmental Science or Environmental Management at Royal Roads University.

C. BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE AT THE UNIVERSITY OF NORTHERN BRITISH COLUMBIA

This option allows Science students with an Associate of Science degree to apply to enter directly into the third year of a B.Sc. in Environmental Science at UNBC.

PROGRAM ADMISSION REQUIREMENTS

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

PROGRAM REQUIREMENTS

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:

Articulated Options Requirements

A. BBA IN ENTREPRENEURIAL LEADERSHIP AT KWANTLEN POLYTECHNIC UNIVERSITY

Mathematics Requirements:

All of:

MATH 1140	Calculus I (Business Applications)	3 credits
MATH 1240	Calculus II (Business Applications)	3 credits

Note: MATH 1112 or either combinations of MATH 1120/1220 or MATH 1130/1230 also qualify, but at least one of the two mathematics courses must be a first year Calculus. Please be aware of mathematics prerequisites (including grades) required for science courses chosen in Years 1 and 2.

First Year Science Requirements:

One of:

CPSC 1100	Introduction to Computer Literacy	3 credits
CPSC 1103	Introduction to Computer Programming I	3 credits

One of:

MATH 1115	Statistics I	3 credits
ACCT 1230	Business Statistics	3 credits

**And four first year science courses chosen from
ASTR, BIOL, CHEM or PHYS**

Second Year Science Requirements:

**Six second year BIOL, CHEM, MATH or PHYS courses
chosen over at least two of these disciplines**

Other Courses Requirements:

One of:

BUSI 1210	Essentials of Management	3 credits
BUSI 1215	Organizational Behaviour	3 credits

All of:

ACCT 2293	Accelerated Introductory Financial Accounting	3 credits
ECON 1150	Principles of Microeconomics	3 credits
MRKT 1199	Introduction to Marketing	3 credits

In addition, a minimum overall GPA of at least 2.7 is required, with a minimum of C grade in any course, for direct admission to Year 3 of the BBA. A minimum grade of C+ is required in MATH 1115 (or ACCT 1230) and ACCT 2293.

**B. BACHELOR OF SCIENCE IN ENVIRONMENTAL
SCIENCE OR ENVIRONMENTAL MANAGEMENT AT
ROYAL ROADS UNIVERSITY**

Mathematics Requirements:

All of:

MATH 1130	Calculus for Life Sciences I	3 credits
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And one of:

MATH 1115	Statistics I	3 credits
MATH 1120	Differential Calculus	3 credits
MATH 1220	Integral Calculus	3 credits
MATH 1230	Calculus for Life Sciences II	3 credits

First Year Science Requirements:

All of:

BIOL 1110	Introductory Biology I	4 credits
BIOL 1210	Introductory Biology II	4 credits
CHEM 1110	The Structure of Matter	4 credits
CHEM 1210	Chemical Energetics and Dynamics	4 credits

And one of:

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

And one of:

CPSC 1100	Introduction to Computer Literacy	3 credits
ENVI 1121	Environmental Issues	3 credits
GEOG 1120	Earth Science	3 credits

Second Year Science Requirements:

All of:

BIOL 2322	Ecology	4 credits
CHEM 2320	Organic Chemistry I	4 credits

And one of:

CHEM 2311	Physical Chemistry for Life Sciences	3 credits
CHEM 2315	Analytical Chemistry	4 credits
CHEM 2410	Physical - Inorganic Chemistry	5 credits
CHEM 2420	Organic Chemistry II	4 credits
CHEM 3310	Physical Chemistry	4 credits

**And two other second year science courses chosen
from:**

Any second year BIOL course		
CPSC 2405	Introduction to Discrete Mathematics I	3 credits
GEOG 2310	Climatology	3 credits
GEOG 2320	Geomorphology	3 credits
Any second year MATH course		
Any second year PHYS course		

Other Courses Requirements:

All of:

ECON 1101	Foundations of Economics	3 credits
Two other transferable university courses		

**C. BACHELOR OF SCIENCE IN ENVIRONMENTAL
SCIENCE AT THE UNIVERSITY OF NORTHERN
BRITISH COLUMBIA**

Mathematics Requirements:

All of:

MATH 1120	Differential Calculus	3 credits
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One of:

MATH 1130	Calculus for Life Sciences I	3 credits
MATH 1220	Integral Calculus	3 credits
MATH 1230	Calculus for Life Sciences II	3 credits

First Year Science Requirements:

All of:

BIOL 1110	Introductory Biology I	4 credits
BIOL 1210	Introductory Biology II	4 credits
CHEM 1110	The Structure of Matter	4 credits
CHEM 1210	Chemical Energetics and Dynamics	4 credits

One of:

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

One of:

PHYS 1102	Physics for Life Sciences II	4 credits
PHYS 1220	Physics for Physical and Applied Sciences II	4 credits

Second Year Science Requirements:**All of:**

BIOL 2322	Ecology	4 credits
BIOL 2330	Microbiology	4 credits
CHEM 2320	Organic Chemistry I	4 credits
GEOG 2320	Geomorphology	3 credits
GEOG 2330	Introduction to Hydrology	3 credits

One of:

BIOL 2321	Cell Biology	4 credits
CHEM 2311	Physical Chemistry for Life Sciences	3 credits
CHEM 2315	Analytical Chemistry	4 credits
CHEM 2420	Organic Chemistry II	4 credits
CHEM 3310	Physical Chemistry	4 credits

Note: Kwantlen BIOL 2321 + BIOL 2421 transfer as UNBC BIOL 311 + CHEM 204, but BIOL 311 is not a requirement for this pathway.

Other Courses Requirements:**All of:**

GEOG 1101	Human Geography	3 credits
GEOG 1110	Atmospheric Science	3 credits
GEOG 1120	Earth Science	3 credits
GEOG 2395	Cartographic Techniques	3 credits

CREDENTIAL AWARDED

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