Chemistry: Associate of Science Degree

Faculty of Science and Horticulture	kpu.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.kpu.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 Chemistry.

STUDENT PROFILE

This program will appeal to students who are interested in either working in laboratories after graduation, or furthering their education by completing a Bachelor of Science degree.

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, students 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

Both of:

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 three 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
CPSC 1100	Introduction to Computer Literacy	3 credits
CPSC 1103	Introduction to Computer Programming I	3 credits
CPSC 1204	Introduction to Computer Programming II	3 credits
GEOG 1110	Atmospheric Science	3 credits
GEOG 1120	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
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

All of:

CHEM 2315	Analytical Chemistry	4 credits
CHEM 2320	Organic Chemistry I	4 credits
CHEM 2420	Organic Chemistry II	4 credits
CHEM 3310	Physical Chemistry	4 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 2410	Physical-Inorganic Chemistry	5 credits
CPSC 2405	Introduction to Discrete Mathematics I	3 credits
GEOG 2310	Climatology	3 credits
GEOG 2320	Geomorphology	3 credits
GEOG 2330	Introduction to Hydrology	3 credits
GEOG 2390	Geographic Information and Data Analysis	3 credits
GEOG 2395	Cartographic Techniques	3 credits
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
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

CREDENTIAL AWARDED

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