

## Other University Programs & Transfer Options

# Bachelor of Science - Transfer

## Chemistry

### The Program

Vancouver Island University offers the first two years of the four-year B.Sc. in Chemistry. Students can transfer to a B.C. university after either the first or second year. The courses required for transfer to University of Victoria (UVic), University of British Columbia (UBC) and Simon Fraser University (SFU) are given below. For further details, please refer to the university calendar and contact the VIU Chemistry department or the Advising Centre.

### UVic Transfer

YEAR 1	Credits
Select <i>one</i> of the following pairs: CHEM 140* - (Chemistry Fundamentals I) <i>and</i> , CHEM 141* - (Chemistry Fundamentals II) <i>or</i> CHEM 142* - (Chemistry Fundamentals II)	8
MATH 121 - (Calculus I) <i>and</i> , MATH 122 - (Calculus II) <i>and</i> , MATH 110 - (Additional Calculus Topics) <i>or</i> MATH 100 - (Calculus for Engineering and Physical Sciences I) <i>and</i> , MATH 101 - (Calculus for Engineering and Physical Sciences II)	6 <i>or</i> 7
PHYS 121 - (Physics for the Physical Sciences I) <i>and</i> , PHYS 122 - (Physics for the Physical Sciences II)	8
English as required (*a)	0 to 6
Two electives (*b)	6
General electives (*c)	0 to 6
<b>Total Credits</b>	<b>34</b>

\* Effective September 2011: **CHEM 140 will replace CHEM 122, CHEM 141 will replace CHEM 111, and CHEM 142 will replace CHEM 121.** Students who have already completed the old Chemistry courses can still use those courses to meet the **1st-year** chemistry requirements.

<b>YEAR 2</b>	<b>Credits</b>
CHEM 221 - (Physical Chemistry) <i>and</i> CHEM 222 - (Inorganic Chemistry)	6
CHEM 231 - (Organic Chemistry I) <i>and</i> CHEM 232 - (Organic Chemistry II)	6
CHEM 213 - (Practical Spectroscopy)	3
CHEM 311 - (Environmental Chemical Analysis)	3
MATH (*d)	6
BIOL 201 - (Principles of Biochemistry) (*e)	0-3
<i>One or two</i> Science electives (*f)	3-6
<b>Total Credits</b>	<b>30</b>

(\*a) One of the following - see current UVic Calendar for details:

- A score of 86% or above on the B.C. Provincial Grade 12 examination within last three years prior to admission to UVic.
- A score of 3 or higher (out of 5) on the Advanced Placement Examination in English Language/Composition or English Literature/Composition.
- ENGL 115.

(\*b) Some science electives are BIOL 121/122, 200 or 201, 202, and one of 209 or 212; CSCI 160, 161, 162, 165; MATH 211, 212.

(\*c) Any courses transferable to UVic.

(\*d) Some electives are MATH 200, 211, 212, 220, 222, 230, 241 (only one statistics course may be included in this specific second-year mathematics requirement).

(\*e) BIOL 201 has BIOL 121/122 for prerequisite. If you do not have the prerequisite, you may choose an additional second year science elective instead, and complete BIOL 200 at UVic in year 3.

(\*f) Courses chosen from lists (\*b) and (\*d) above as well as CSCI 240, 250, 260, 261, 265.

## **UBC Transfer**

**Note:** Problems may arise with transfer to UBC after 1 year; not with transfer after 2 years - see Department Chair for more information.

YEAR 1	Credits
Select <i>one</i> of the following pairs: CHEM 140* - (Chemistry Fundamentals I) <i>and</i> , CHEM 141* - (Chemistry Fundamentals II) <i>or</i> CHEM 142* - (Chemistry Fundamentals II)	8
MATH 121 - (Calculus I) <i>and</i> , MATH 122 - (Calculus II) <i>and</i> , MATH 110 - (Additional Calculus Topics) <i>or</i> MATH 100 - (Calculus for Engineering and Physical Sciences I) <i>and</i> , MATH 101 - (Calculus for Engineering and Physical Sciences II)	6 <i>or</i> 7
PHYS 111 - (Physics for the Life Sciences I) <i>and</i> , PHYS 112 - (Physics for the Life Sciences II)(*a) <i>or</i> PHYS 121 - (Physics for the Physical Sciences I) <i>and</i> , PHYS 122 - (Physics for the Physical Sciences II)(*a)	8
English as required (*b)	6
Two electives (*c)	6
<b>Total Credits</b>	<b>34</b>

\* Effective September 2011: **CHEM 140 will replace CHEM 122, CHEM 141 will replace CHEM 111, and CHEM 142 will replace CHEM 121.** Students who have already completed the old Chemistry courses can still use those courses to meet the **1st-year** chemistry requirements.

YEAR 2	Credits
CHEM 221 - (Physical Chemistry) <i>and</i> CHEM 222 - (Inorganic Chemistry)	6
CHEM 231 - (Organic Chemistry I) <i>and</i> CHEM 232 - (Organic Chemistry II)	6
CHEM 311 - (Environmental Chemical Analysis)	3
MATH 200 - (Calculus of Several Variables) <i>and</i> , MATH 241 - (Linear Algebra)	6
One Science elective (*d)	3
Two Arts electives (*c)	6
<b>Total Credits</b>	<b>30</b>

(\*a)Physics 121/122 are preferred; if Physics 111/112 are chosen instead, minimum of B grade in both is required for some second-year physics electives.

(\*b)Degree English Requirement

(\*c)Any courses transferable to UBC. In addition to the two first-year English courses, 12 credits of courses in UBC Faculty of Arts are required for B.Sc. degree. However, students in first year should consider Biology 121/122, or Computing Science 160/161.

(\*d)Any courses in Science and Mathematics transferable to UBC. Chemistry 213 has unassigned 2nd year credit.

## SFU Transfer

YEAR 1	Credits
Select <i>one</i> of the following pairs: CHEM 140* - (Chemistry Fundamentals I) <i>and</i> , CHEM 141* - (Chemistry Fundamentals II) <i>or</i> CHEM 142* - (Chemistry Fundamentals II)	8
MATH 121 - (Calculus I) <i>and</i> , MATH 122 - (Calculus II) <i>and</i> , MATH 110 - (Additional Calculus Topics) <i>or</i> MATH 100 - (Calculus for Engineering and Physical Sciences I) <i>and</i> , MATH 101 - (Calculus for Engineering and Physical Sciences II)	6 <i>or</i> 7
PHYS 121 - (Physics for the Physical Sciences I) <i>and</i> , PHYS 122 - (Physics for the Physical Sciences II)	8
English <i>or</i> Arts electives (*a)	6
Two Electives (*b)	6
<b>Total Credits</b>	<b>34</b>

\* Effective September 2011: **CHEM 140 will replace CHEM 122, CHEM 141 will replace CHEM 111, and CHEM 142 will replace CHEM 121.** Students who have already completed the old Chemistry courses can still use those courses to meet the **1st-year** chemistry requirements.

YEAR 2	Credits
CHEM 221 - (Physical Chemistry) <i>and</i> CHEM 222 - (Inorganic Chemistry)	6
CHEM 231 - (Organic Chemistry I) <i>and</i> CHEM 232 - (Organic Chemistry II)	6
CHEM 311 - (Environmental Chemical Analysis)	3
MATH 200 - (Calculus of Several Variables)	3
MATH 241 - (Linear Algebra)	3
Three Science electives (*b)	9
<b>Total Credits</b>	<b>30</b>

(\*a) First-year English courses are not required if SFU is satisfied that students are proficient in English.

(\*b) Any courses transferable to SFU. Computing Science 160 and 161 satisfy SFU's Computing Science requirement but provide only three transfer credits. Chemistry 213 has unassigned 2nd year credit.