CHEMISTRY, B.SC. MAJOR

Degree Requirements

Four Year Major (Including Co-operative Option if Selected) [1, 2]

Course	Title	Hours
Year 1		
CHEM 1100	Introductory Chemistry 1: Atomic and Molecular Structure and Energetics	3
CHEM 1110	Introductory Chemistry 2: Interaction, Reactivity, and Chemical Properties (C+)	3
CHEM 1120	Introduction to Chemistry Techniques [3]	3
PHYS 1020 or PHYS 1050	General Physics 1 or Physics 1: Mechanics	3
PHYS 1030 or PHYS 1070	General Physics 2 or Physics 2: Waves and Modern Physics	3
MATH 1500	Introduction to Calculus [4]	3
MATH 1700	Calculus 2 [4]	3
6 credit hours from the Faculty of Arts, which should include the required "W" course		6
3 credit hours of electives [2]		3
	Hours	**30**
Year 2		
CHEM 2100	Organic Chemistry 1: Foundations of Organic Chemistry	3
CHEM 2110	Organic Chemistry 2: Foundations of Organic Synthesis	3
CHEM 2122	Experimental Organic Chemistry	3
CHEM 2300	Inorganic Chemistry 1: Structure and Applications	3
CHEM 2510	Introduction to Analytical Chemistry	3
CHEM 2520	Introduction to Analytical Chemistry Techniques	2
CHEM 2600	Physical Chemistry 1	3
CHEM 2720	Principles and Practices of the Modern Biochemistry Laboratory	3
6 credit hours of electives [2]		6
	Hours	**29**
Year 3		
CHEM 3100	Organic Chemistry 3: Advanced Organic Synthesis	3
CHEM 3120	Advanced Organic Chemistry Laboratory Techniques	2
CHEM 3300	Inorganic Chemistry 2: Reactivity and Properties	3
CHEM 3320	Inorganic Chemistry Laboratory	2
CHEM 3500	Instrumental Analysis	3
CHEM 3520	Instrumental Analysis Laboratory	2
CHEM 3600	Physical Chemistry 2	3
CHEM 3620	Physical Chemistry Laboratory	2
CHEM 3820	Integrated Chemistry Laboratory 1	2
CHEM 3840	Integrated Chemistry Laboratory 2	3
6 credit hours of electives [2]		6
Work Terms (if Co-op selected):		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
	Hours	**31**
Year 4		
CHEM 4610	Advanced Chemical Techniques	6
6 credit hours of Chemistry courses at the 4000 level		6
18 credit hours of electives [2]		18
Work Terms (if Co-op selected):		
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	**30**
	Total Hours	**120**

1. IMPORTANT: The four-year Major program need not be completed in the manner prescribed in the grid above. The grid indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.
2. CHEM 1018, CHEM 2523, and CHEM 3331 may not count towards the 120 credit hours required for this degree.
3. CHEM 1122 and CHEM 1126 may be used in lieu of CHEM 1120. Note: CHEM 1122 and CHEM 1126 are only available to Price Faculty of Engineering students.
4.
   - MATH 1230, MATH 1510, the former MATH 1520, or MATH 1524 may be taken in place of MATH 1500;
   - MATH 1232 or MATH 1710 may be taken in place of MATH 1700.

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