

MAJOR CHEMISTRY



CHEMISTRY
THE UNIVERSITY OF BRITISH COLUMBIA

FIRST YEAR		THIRD AND FOURTH YEARS	
COMMUNICATION REQUIREMENT ¹	3	BIOL 201 (OR BIOC 202) ⁸	3
CHEM 121 (111), 123	8	CHEM 300 ¹	3
MATH 100 OR 102 OR 1042	3	CHEM 304	3
MATH 101 OR 103 OR 1053	3	CHEM 311	3
PHYS 100-LEVEL4	6	CHEM 312	3
ELECTIVES ^{5,6}	7	CHEM 325, 345	4
TOTAL CREDITS	30	TWO OF CHEM 305, 313, 318, 327, 330, 412	6
SECOND YEAR		CHEM 445 ⁹	3
CHEM 203 ⁷	4	CHEM ELECTIVES ^{6,9,10}	12
CHEM 208, 218	6	ELECTIVES ^{5,6}	20
CHEM 211	4	TOTAL CREDITS	60
CHEM 213, 245	4		
MATH 200, 221	6	TOTAL CREDITS FOR DEGREE	120
ELECTIVES ^{5,6}	6		
TOTAL CREDITS	30		

¹ Of the 6 credits of coursework is required to satisfy the Communication Requirement, 3 credits are specified in third year (CHEM 300). The remaining 3 credits must be chosen from the list of acceptable courses, see [Communication Requirement](#). ENGL credits beyond those needed to satisfy the Communication Requirement may be applied towards the Faculty of Science [Arts Requirement](#).

² MATH 180 or 184 or 120 may substitute for any of the specified differential calculus courses listed by decreasing the electives by 1 credit. MATH 110 may substitute for any of the specified differential calculus courses listed by decreasing the electives by 3 credits.

³ MATH 121 may substitute for any of the specified integral calculus courses listed by decreasing the electives by 1 credit.

⁴ Chosen from 100-level PHYS courses, excluding PHYS 100. PHYS 109 or 119 are recommended. Students without Physics 12 must take PHYS 100 before taking other 100-level PHYS courses.

⁵ Electives must be chosen to ensure the Faculty of Science: a) [Arts Requirement](#), b) [Upper-level Requirement](#), and c) [Breadth Requirement](#) are met. Elective credits may be redistributed among the years in this specialization, provided the total number remains the same. The year level of an elective does not need to correspond to the year level of the specialization. Students who do not have credit for Biology 11 or 12 must take 3 credits of 100-level BIOL (usually BIOL 111). Students with credit for Biology 11 or 12 must successfully complete 3 credits of an ASTR, BIOL, EOSC, or GEOB lecture course.

⁶ Students may elect to apply elective credits towards a [Specific Focus Area in Chemistry](#).

⁷ Students with CHEM 235 and a score of 76% or higher in CHEM 233 may apply for admission to this specialization and will be allowed to use CHEM 233 and 235 in place of CHEM 203.

⁸ BIOC 203 is a suitable substitute for this requirement. For students without credit for BIOL 200, selecting BIOL 201 requires either CHEM 313 or CHEM 330.

⁹ With permission, CHEM 449 or 6 credits of CHEM 445 may be substituted for 3 credits of CHEM 445 and 3 credits of 400-level CHEM lecture electives.

¹⁰ Chosen from 300- and 400- level CHEM lecture courses. At least 3 credits must be chosen from 400-level CHEM lecture courses, excluding the credits associated with substitutions involving CHEM 445 or CHEM 449, as detailed in footnote 9.