

CHEMISTRY B.S.

All students must meet the University Requirements. (http://catalogue.uvm.edu/undergraduate/academicinfo/degree_requirements/)

All students must meet the College Requirements. (http://catalogue.uvm.edu/undergraduate/artsandsciences/#requirements_text)

Students pursuing a Bachelor of Science degree with a major in chemistry complete an extensive set of courses representing the traditional chemical subdisciplines and engage in research. The B.S. degree chemistry major is certified by the American Chemical Society, and it is particularly good preparation for graduate study in chemistry.

MAJOR REQUIREMENTS

CHEM 047 & CHEM 048	Organic Chemistry for Majors 1 and Organic Chemistry for Majors 2	8
CHEM 051 & CHEM 052	Exploring Chemistry 1 and Exploring Chemistry 2	2
CHEM 114	Advanced Synthesis Techniques	3
CHEM 121	Quantitative Analysis	4
CHEM 165	Intro Physical Chemistry	3
CHEM 166	Physical Chemistry Lab	1
CHEM 167	Physical Chemistry Preparation	1 or 4
or MATH 121	QR: Calculus III	
CHEM 181	2nd Year Seminar: Writing	1
CHEM 182	2nd Year Seminar: Presentation	1
CHEM 199	Professional Development	1
CHEM 205	Biochemistry I	3
CHEM 219	Instrumental Analysis Lab	1
CHEM 221	Instrumental Analysis	3
CHEM 231	Advanced Inorganic Chemistry	3
CHEM 260	Advanced Physical Chemistry	3
CHEM 291	Undergraduate Research	3
6 credits of upper-level electives in Chemistry or related sciences from the following: BIOC 205, BIOC 206, BIOC 207, BIOC 263, BIOC 275, any CHEM course numbered 200 or above, PHRM 201, PHRM 240, PHRM 272, PHRM 290, GEOL 234, GEOL 235, GEOL 246, PSS 264. No more than 3 credits of CHEM 290 plus CHEM 291 can be applied toward these electives.		6
Complete option A or B:		8
Option A		

MATH 021 & MATH 022	QR: Calculus I and QR: Calculus II	
Option B		
MATH 019 & MATH 023	QR: Fundamentals of Calculus I and QR: Transitional Calculus	
PHYS 051	Fundamentals of Physics I	4
PHYS 152	Fundamentals of Physics II	4
Students may substitute: (However, the program of study recommended above will provide a better preparation for advanced course work in chemistry.)		16
CHEM 031 & CHEM 032	General Chemistry 1 and General Chemistry 2 (for CHEM 051 and CHEM 052)	
CHEM 141 & CHEM 142	Organic Chemistry 1 and Organic Chemistry 2 (for CHEM 047 and CHEM 048)	