CHEMISTRY B.A.

All students must meet the Degree and University Requirements..

All students must meet the Catamount Core Curriculum Requirements.

All students must meet the College Requirements.

Students pursuing a Bachelor of Arts degree with a major in Chemistry complete a set of courses representing the traditional chemical subdisciplines and have great flexibility in the focus of their upper level coursework. Students may elect a major that is certified by the American Chemical Society by completing CHEM 2605, CHEM 3320, CHEM 3325, BIOC 3005, and 3 credits of CHEM 3991, CHEM 2995, or CHEM 3995. The B.A. Chemistry major degree provides students a solid foundation in chemistry to pursue careers in a range of fields.

MAJOR REQUIREMENTS

At least 38 credits in major courses, plus 14-16 credits in ancillary courses, including:

Requirement Description		Credits
FOUNDATIONS. At least 9 credits.		
GENERAL CHEMISTRY. Choose 1 of the following options:		1-8
Option A (recommended):		
CHEM 1070	Discovering Chemistry	
Option B:		
CHEM 1400 & CHEM 1450	General Chemistry 1 and General Chemistry 2	
ORGANIC CHEMISTRY. Choose 1 of the following options:		8
Option A (recommended):		
CHEM 1500 & CHEM 1550	Organic Chemistry for Majors 1 and Organic Chemistry for Majors 2	
Option B:		
CHEM 2580 & CHEM 2585	Organic Chemistry 1 and Organic Chemistry 2	
ANCILLARY COURSES. At least 14 credits.		
MATHEMATICS. Choose 1 of the following options:		6-8
Option A:		
MATH 1234 & MATH 1248	Calculus I and Calculus II	
Option B:		
MATH 1212 & MATH 1242	Fundamentals of Calculus I and Transitional Calculus	
Option C:		
MATH 1212 & MATH 1224	Fundamentals of Calculus I and Fundamentals of Calculus II	
PHYSICS. Choose 1 of the following options:		8
Option A:		
PHYS 1600 & PHYS 1650	Fundamentals of Physics I and Fundamentals of Physics II	
Option B:		
PHYS 1400 & PHYS 1450	Elementary Physics I and Elementary Physics II	
Option C:		
PHYS 1500 & PHYS 1550	Physics for Engineers I and Physics for Engineers II	
CORE COURSES. 17 credits.		
CHEM 2020	Communication Skills Seminar	3
CHEM 2014	Professional Development	1
CHEM 2050	Advanced Synthesis Techniques	3
CHEM 2310	Quantitative Analysis	4
Choose 1 of the following options:		
Option A:		
CHEM 3610 & CHEM 3602	Chemical Thermodynamics and Physical Chemistry Preparation	
Option B:		
CHEM 2600	Physical Chem for Life Science	
CHEM 3400	Advanced Inorganic Chemistry	3
ADVANCED ELECTIVES. 12 credits.		
6-12 additional credits from the folllowing:		6-12
CHEM numbered 3000 to 3990		
CHEM numbered 4000 to 4990		
ALE 3640, BIOC 3005, BIOC 3006, BIOC 3007, BIOC 3063, BIOC 3075, GEOL 4405, PHRM 3010, PHRM 5400, PHRM 3720, PHRM 3900		
With department permission, CHEM numbered 6000 to 6990		
Up to 6 additional credits from the following:		0-6
CHEM 3991	Internship	
CHEM 3995	Undergraduate Research	
CHEM 4996	Honors	

Additional courses, including graduate-level courses, may be accepted as electives with prior approval from the Chemistry Department. Graduate courses are often open to upper-level undergraduate students with instructor permission.	

RESTRICTIONS

Students completing the B.A. in Chemistry may not also receive the B.S. in Biochemistry or the B.S. in Chemistry.

OTHER INFORMATION

In the College of Arts and Sciences (CAS), only one course may overlap between a major and a minor or between two CAS majors.

Courses for the major and/or its pre/co-requisites that are cross-listed in the catalog or schedule of courses under another course subject code may be taken under that other subject code and still count for these requirements.

With the approval of the chair/director, courses that applied to the major in previous years but have since been deactivated may be applied to this year's major requirements if they are reactivated.

For a Bachelor of Arts degree, no more than 45 credits in courses with the same departmental subject code may be used toward completion of the 120 credits required for graduation.

At least half of the credits used to complete major requirements must be taken at the University of Vermont.