Chemistry, ACS, BS

This sample degree plan is a guide, to be used for planning in consultation with your academic advisor. Actual course sequence may vary by student. A ▲ symbol identifies courses that must be taken and passed during the suggested semester in order for a student to stay on track toward completing the degree program within four years.

Sequence	Course Prefix	Course Number	Course Title	Credit Hours	Min Grade	Notes
Freshman Fall Semester						
			USP First-Year Seminar	3	C	FY
▲	CHEM	1020	General Chemistry I [1]	4	C	Can substitute CHEM 1050 [1]
	ENGL	1010	College Composition and Rhetoric	3	C	C1
	MATH	2200	Calculus I [1]	4	C	Q
			Electives [2]	3	C	
			Credit hours subtotal:	**17**		
Freshman Spring Semester						
			USP Human Culture [3]	3		H
▲	CHEM	1030	General Chemistry II	4	C	Can substitute CHEM 1060
	MATH	2205	Calculus II	4	C	
	POLS	1000	American and Wyoming Government [3]	3		V
			Electives [2]	3	C	
			Credit hours subtotal:	**17**		
Sophomore Fall Semester						
			USP Communication 2 [3]	3	C	C2
	CHEM	2420	Organic Chemistry I	4	C	
	MATH	2210	Calculus III	4	C	
			Electives [2]	6	C	
			Credit hours subtotal:	**17**		
Sophomore Spring Semester						
	CHEM	2230	Quantitative Analysis	4	C	Offered spring only
	CHEM	2440	Organic Chemistry II	4	C	
	CHEM	4515	Applied Math for Physical Chemistry [4]	3	C	Offered spring only
			Electives [2]	6	C	
			Credit hours subtotal:	**17**		

This sample degree plan is a guide for course work in the major. • Course sequencing may need to be altered if ACT, SAT or Math Placement scores require a student to take pre-college courses before taking required math or English courses. • Not all courses are offered every semester and some electives may have prerequisites. Students should review course descriptions in the University Catalog and consult with their academic advisor to plan accordingly.

University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

College of Arts and Sciences requirements:

Students must take two "core" courses in addition to UW's University Studies Program requirements: Diversity in the United States (ASD) and Global Awareness (ASG). • No more than 60 hours in the major subject may be used toward the 120 credit hours required for graduation. • At least 30 hours in the major subject must be completed with a grade of C or better (the major may require more).

Notes continued on next page(s).

University of Wyoming Sample Four-Year Degree Plan
Catalog Year: 2019-20

Chemistry, ACS, BS

Sequence	Course Prefix	Course Number	Course Title	Credit Hours	Min Grade	Notes
Junior Fall Semester						
			USP Human Culture [3]	3		H
	CHEM	4100	Inorganic Chemistry Lab	2	C	CHEM 4110 is prereq or core; may be taken in spring
	CHEM	4110	Introductory Inorganic Chemistry	3	C	Offered fall only
	CHEM	4400	Biological Chemistry	3	C	Offered fall only; Can substitute MOLB 3610 or 4600
	CHEM	4930	Undergraduate Research	1	C	
	PHYS	1210	Engineering Physics I	4	C	PN
			Credit hours subtotal:	**16**		
Junior Spring Semester						
			A&S Core Global Awareness	3		ASG
	CHEM	4930	Undergraduate Research	1	C	
	PHYS	1220	Engineering Physics II	4	C	PN
			Electives	4		
			Upper Division Electives	3		
			Credit hours subtotal:	**15**		
Senior Fall Semester						
			USP Communication [3]	3	C	C3; recommend CHEM 4010, ENGL 4010, MICR 4321
			A&S Core Diversity in the US	3		ASD
	CHEM	4000	Career Skills [5]	1	S	Offered fall only; offered S/U only
	CHEM	4230	Instrumental Methods of Chemical Analysis	4	C	Offered fall only
	CHEM	4507	Physical Chemistry I	3	C	Offered fall only
	CHEM	4525	Physical Chemistry Lab I	1	C	Offered fall only
	CHEM	4930	Undergraduate Research	1	C	
			Credit hours subtotal:	**16**		
Senior Spring Semester						
	CHEM	4508	Physical Chemistry II	3	C	Offered spring only
	CHEM	4530	Physical Chemistry Lab II	1	C	Offered spring only
			Upper Division Chemistry Elective	3	C	Can't include CHEM 4920
			Upper Division Electives	6		
			Credit hours subtotal:	**13**		
			TOTAL CREDIT HOURS	**128**		

Chemistry ACS, BS Program notes:

The Department of Chemistry offers both BA and BS degree programs, with two BS degree programs available. The BS provides for an intensive study of chemistry and is appropriate for those continuing in the field. The BS ACS is the more rigorous of the two BS degree programs and leads to a professional degree approved by the American Chemical Society (ACS). Discussions with a departmental advisor will allow students to choose the most appropriate major for career objectives.

The professional BS (ACS) in chemistry requires a minimum of 47 hours of chemistry.

[1] See the "Prerequisite and MPE Cut Score Reference Chart" on the Math Placement website for the most up-to-date math placement

[2] Program Supporting Courses: The electives can be chosen to complete the 18 directed credits (program supporting courses); any courses taken to fulfill the 18 directed electives require a grade of C or better and must be approved by the student's advisor and Chemistry

[3] Students with specific additional interests (e.g. pre-med or another pre-professional program) may wish to move their V/H/C2 courses to alternate semesters so as to take other necessary required courses (e.g. LIFE 1010, MOLB 3000, etc.).

[4] This course satisfies the computer science requirement for the Chemistry ACS major, although there are other alternatives, including STAT

[5] Students taking CHEM 4010 or MICR 4321 as their C3 are not required to take CHEM 4000.