

First Year – Fall Semester			First Year – Spring Semester		
CHEM 111, 111L	Principles of Chemistry I Sufficient math scores or min 'C' in CHEM 101, 101L, MATH 143, 160, or 170	4	CHEM 112, 112L	Principles of Chemistry II CHEM 111 or Permission	5
MATH 170	Analytic Geometry and Calculus I MATH 143 with 'C' or better and 144, or sufficient exam scores	4	MATH 175	Analytic Geometry and Calculus II MATH 170 with a grade of 'C' or better	4
ENGL 101	Intro to College Writing Sufficient ACT/SAT scores	3	ENGL 102	College Writing and Rhetoric ENGL 101 or sufficient test scores	3
*COMM 101	Fundamentals of Oral Communication	2		Humanities/Social Science Course	3
	Humanities/Social Science Course	3			
	Total Credits	16		Total Credits	15
Second Year – Fall Semester			Second Year – Spring Semester		
CHEM 253	Quantitative Analysis (Fall only) CHEM 112	3	CHEM 372	Organic Chemistry II (Spring only) CHEM 277	3
CHEM 254	Quantitative Analysis Lab (Fall only) CHEM 253	2	CHEM 374	Organic Chemistry II Lab (Spring only) CHEM 278; CHEM 372	1
CHEM 277	Organic Chemistry I CHEM 112	3	PHYS 211, 211L	Engineering Physics I (with lab) MATH 170	4
CHEM 278	Organic Chemistry I Lab CHEM 277	1	*CS 112	Computational Thinking and Problem Solving MATH 108 with 'C' or ACT/SAT score to qualify for MATH 143	3
MATH 275	Analytic Geometry and Calculus III MATH 175	3		American Diversity/International Course	3
	Humanities/Social Science Course	3			
	Total Credits	15		Total Credits	14
Third Year – Fall Semester			Third Year – Spring Semester		
CHEM 305	Physical Chemistry I (Fall only) CHEM 112, 112L and Math 275, PHYS 212 or PHYS 213	3	CHEM 306	Physical Chemistry II (Spring only) CHEM 305	3
CHEM 307	Physical Chemistry I Lab (Fall only) CHEM 305	1	CHEM 308	Physical Chemistry II Lab (Spring only) CHEM 306	1
PHYS 212, 212L	Engineering Physics II (with lab) PHYS 211 and 211L; Math 175	4	CHEM 463	Inorganic Chemistry (Spring only, odd years) CHEM 305 or Permission	3
BIOL 380	Biochemistry (Fall only) CHEM 112, 112L, and 277	4	CHEM 491	Research Permission	2
	American Diversity/International Course	3		Humanities/Social Science Course	3
			ELECTIVE	UPDV elective as needed	3
	Total Credits	15		Total Credits	15
Fourth Year – Fall Semester			Fourth Year – Spring Semester		
CHEM 409	Proseminar Junior Standing	1	CHEM 454	Instrumental Analysis (Spring only) CHEM 253, 254, and 305; CHEM 306	4
CHEM ELECTIVE	CHEM 472, 473, 495, 509, 553, or PHYS 333 Prerequisites vary by course	3	CHEM 464	Inorganic Chemistry (Spring, even years) CHEM 463, 466, or Permission	3
CHEM 491	Research Permission	2	CHEM 465	Inorganic Chemistry Lab (Spring only) CHEM 464	1
ELECTIVE	Other elective as needed	3	CHEM ELECTIVE	CHEM 472, 473, 495, 509, 553, or PHYS 333 Prerequisites vary by course	3
ELECTIVES	UPDV electives as needed	6	ELECTIVE	UPDV elective as needed	3
	Total Credits	15		Total Credits	14

*Other options available

Requirements subject to change. See UI Catalog for complete degree requirements and additional information.
Courses in gold are prerequisites. Courses in italics are co-requisites. UPDV denotes "upper division"