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, 111L 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 102	College Writing and Rhetoric ENGL 101 or sufficient test scores	3	BIOL 115, 115L	Cells and the Evolution of Life (with lab) CHEM 101, 101L or 111, 111L	4
*COMM 101	Fundamentals of Oral Communication	2		Humanities/Social Science Course (PSYC 101 or SOC 101 recommended)	3
	American Diversity/International Course	3			
	Total Credits	16		Total Credits	16
Second Year – Fall Semester			Second Ye	ear – 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		Humanities/Social Science Course	3
	Humanities/Social Science Course (PSYC 101 or SOC 101 recommended)	3			
	Total Credits	15		Total Credits	14
Third Year	– Fall Semester		Third Yea	r – 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	**BIOL 312, 313	Molecular and Cellular Biology and Lab (Spring only) BIOL 115, 115L	4
BIOL 380	Biochemistry (Fall only) CHEM 112, 112L, and 277	4	ELECTIVES	Other electives as needed	6
BIOL 382	Biochemistry Lab (Fall only) BIOL 380 or equivalent	2		Humanities/Social Science Course	3
	Total Credits	14		Total Credits	17
Fourth Year – Fall Semester		1	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 473	Intermediate Organic Chemistry (Fall only) CHEM 372; CHEM 306	3	CHEM 472	Medicinal Chemistry (Alternate years) CHEM 473, 476, or permission	3
**ENGL 207 or 208	Persuasive Writing or Personal and Exploratory Writing ENGL 102 or equivalent	3	ELECTIVES	UPDV electives as needed	3
ELECTIVES	UPDV electives as needed	6		American Diversity/International Course	3
	Total Credits	13	1	Total Credits	13

^{*}Other options available



 $[\]ensuremath{^{**}}\xspace$ Not required for major, but highly recommended for MCAT preparation