

BACHELOR OF SCIENCE CHEMISTRY

Our chemistry program provides a quality education in fundamental, applied, and interdisciplinary areas of the chemical sciences. Students will have a broad education necessary to understand the contemporary issues and impact of the chemical sciences in global, economic, environmental, medicinal, and societal contexts. There are six concentrations in the areas of biomedical science, environmental science, forensic science, and pre professional programs in pre medicine, pre dentistry, and pre pharmacy. There is an American Chemical Society certification option for students interested in pursuing graduate study in chemistry and a chemistry option without a concentration to allow students to personalize their program.

*College of
Science,
Engineering,
and Technology*



**COLLEGE OF
SCIENCE, ENGINEERING, AND TECHNOLOGY
CHEMISTRY-GENERAL**

Students must choose Math and Chemistry elective course options from the lists below. Students pursuing a teacher license should consult the College of Education and Human Development for courses required using the general electives within this curriculum.

Chemistry Math Option Courses

Students must choose six (hours) of the following math options:

Chemistry Math Options	COURSE	COURSE TITLE	CREDIT HOURS
	MATH 111	College Algebra	3
	MATH 112	Plane Trigonometry	3
	MATH 118	Algebra II and Plane Trigonometry	5
	MATH 242	Calculus II	3
	MATH 243	Calculus III	3

Comments: If taking MATH 118, there will be one less credit hour needed for the student to graduate. If a student is qualified to take MATH 241 in the freshman year, MATH 111, 112, or 118 are not required, rather, the student can take MATH 242, MATH 243, or other elective

Chemistry Elective Option Courses

Students must choose six (6) hours from the following chemistry elective options:

Chemistry Elective Options	COURSE	COURSE TITLE	CREDIT HOURS
	CHEM 410	Environmental Chemistry	3
	CHEM 432	Biochemistry II	3
	CHEM 436	Physical Organic Chemistry	3
	CHEM 438	Organic Synthesis	3
	CHEM 439	Introduction to Polymer Chemistry	3
	CHEM 441	Inorganic Chemistry II	3
	CHEM 451	Chemical Application for Group Theory	3
	CHEM 452	Atomic and Molecular Structure	3
	CHEM 453	Thermodynamics	3
	CHEM 458	Quantum Chemistry	3
	CHEM 471	Forensic Chemistry	3

Comments:

Student Name: _____

SCIENCE, ENGINEERING, AND TECHNOLOGY

Expected Graduation Date: _____

J-Number: _____

CHEMISTRY

Pathway: _____

Advisor: _____

CONCENTRATION: GENERAL**FRESHMAN YEAR FALL 1ST SEMESTER**

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
UNIV 100	University Success	2	UR		
ENG 104	Composition I	3	GEC		
CHEM 141 & CHML 141	General Chemistry and Lab	4	DPR		
BIO 111 & BIOL 111	General Biology I and Lab	4	GEC		
MATH 111	College Algebra	3	GEC		
TOTAL CREDIT HOURS		16	TERM GPA:		

Comments: MATH 111 or ACT Math score of 21 is required to take CHEM 141.

FRESHMAN YEAR SPRING 2nd SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
CHEM 142 & CHML 142	General Chemistry II & Lab	4	DPR		
ENG 105	Composition II	3	GEC		
MATH 241	Calculus I & Lab	3	DPR		
	Humanities & Fine Arts Option	3	GEC		
	Pathway Option	3	PATH		
TOTAL CREDIT HOURS		16	TERM GPA:		

Comments:

SOPHOMORE YEAR FALL 1ST SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
CHEM 241 & CHML 241	Organic Chemistry I & Lab	4	DPR		
PHY 211 & PHY 211	General Physics I & Lab	4	GEC		
MATH 242	Calculus II	3	DPR		
	Humanities & Fine Arts Option	3	GEC		
	Pathway Option	3	PATH		
TOTAL CREDIT HOURS		17	TERM GPA:		

Comments:

SOPHOMORE YEAR SPRING 2ND SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
UNIV 200	Civic Engagement	1	UR		
CHEM 242 & CHML 242	Organic Chemistry II & Lab	4	DPR		
CHEM 340 & CHML 340	Inorganic Chemistry & Lab	4	DPR		
PHY 212 & PHY 212	General Physics II & Lab	4	DPR		
	Pathway Option	3	PATH		
TOTAL CREDIT HOURS		16	TERM GPA:		

Comments:

JUNIOR YEAR FALL 1ST SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
CHEM 320 & CHML 320	Analytical Chemistry & Lab	4	DPR		Fall Only
CHEM 341 & CHML 341	Physical Chemistry & Lab	4	DPR		Fall Only
CHEM 381	Chemistry Seminar I	0.5	DPR		Fall Only
	Social & Behavioral Science Option	3	GEC		
	Humanities & Fine Arts Option	3	GEC		
	TOTAL CREDIT HOURS	14.5	TERM GPA:		

Comments:

JUNIOR YEAR SPRING 2ND SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
CHEM 310	Introduction to Research	2	DPR		Spring Only
CHEM 380	Independent Study	1	DPR		
CHEM 382	Chemistry Seminar II	0.5	DPR		Spring Only
	Chemistry Math Option	3	DPE		
	Social & Behavioral Science Option	3	GEC		
	General Elective	3	GEL		
	General Elective	3	GEL		
	TOTAL CREDIT HOURS	15.5	TERM GPA:		

Comments:

SENIOR YEAR FALL 1ST SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
CHEM 481	Chemistry Seminar III	0.5	DPR		Fall Only
	Chemistry Elective	3	DPE		
	General Elective	3	GEL		
	General Elective	3	GEL		
	General Elective	3	GEL		
	TOTAL CREDIT HOURS	12.5	TERM GPA:		

Comments:

SENIOR YEAR SPRING 2ND SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
CHEM 421 & CHML 421	Instrumentation & Instrumentation Lab	4	DPR		Spring Only
CHEM 429	Organic Structure Determination by Spectroscopy	3	DPR		Spring Only
CHEM 482	Chemistry Seminar IV	0.5	DPR		Spring Only
	Chemistry Elective	3	DPE		
	General Elective	3	GEL		
	TOTAL CREDIT HOURS	13.5	TERM GPA:		

Comments:

TOTAL HOURS: 121 REQUIRED

Candidates that transfer 12 or more hours of college credit are exempt from UNIV 100: University Success; however, the student must take 2 hours of general electives to replace UNIV 100.

Student Signature: _____

Advisor Signature: _____