

BACHELOR OF SCIENCE CHEMISTRY

Biomedical Sciences

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
CONCENTRATION: BIOMEDICAL SCIENCE**

Students should choose two (2) biochemistry elective options, one of which must have a lab. Biochemistry elective hours must total seven (7) hours.

Biochemistry Elective Option Courses			
Biochemistry Elective Options	COURSE	COURSE TITLE	CREDIT HOURS
	BIO 234	Human Anatomy and Physiology	3
	BIOL 235	Human Anatomy and Physiology Lab	1
	BIO 313	Introduction to Microbiology	3
	BIOL 313	Introduction to Microbiology Lab	1
	BIO 318	Introduction to Genetics	3
	BIOL 318	Introduction to Genetics Lab	1
	BIO 440	Cell Biology	3
	BIOL 440	Cell Biology Lab	1
	BIO 409	General Genetics	3
Comments:			

Student Name: _____

**COLLEGE OF
SCIENCE, ENGINEERING, AND TECHNOLOGY**

Expected Graduation Date: _____

J-Number: _____

CHEMISTRY

Pathway: _____

Advisor: _____

CONCENTRATION: BIOMEDICAL SCIENCE
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		
	Humanities & Fine Arts Option	3	GEC		
	TOTAL CREDIT HOURS	16	TERM GPA:		

Comments:

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	GEC		
BIO 112 & BIOL 112	General Biology II & Lab	4	DPR		
	Pathway Option	3	PATH		
	TOTAL CREDIT HOURS	17	TERM GPA:		

Comments:

SOPHOMORE YEAR FALL 1ST SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
CHEM 241 & CHML 242	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		
PHY 212 & PHY 212	General Physics II & Lab	4	DPR		
CHEM 340 & CHML 340	Inorganic Chemistry I & Lab	4	DPR		Spring Only
	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	4	DPR		Fall Only
CHEM 381	Chemistry Seminar	0.5	DPR		Fall Only
CHEM 341 & CHML 341	Physical Chemistry I & Lab	4	DPR		Fall Only
CHEM 380	Independent Study	1	DPR		
	Humanities & Fine Arts Option	3	GEC		
	Social & Behavioral Science Option	3	GEC		
	TOTAL CREDIT HOURS	15.5	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		
CHEM 380	Independent Study	1	DPR		
CHEM 382	Chemistry Seminar	0.5	DPR		
	Biomedical Option & Lab	4	PC		
	Biomedical Option	3	PC		
	Social & Behavioral Science Option	3	GEC		
	TOTAL CREDIT HOURS	13.5	TERM GPA:		

Comments:

SENIOR YEAR FALL 1ST SEMESTER

COURSE	COURSE TITLE	CREDIT HOURS	COURSE TYPE	GRADE	SUCCESS MARKER/NOTE
CHEM 431 & CHML 431	Biochemistry & Lab	4	DPR		
CHEM 481	Chemistry Seminar	0.5	DPE		Fall Only
	General Elective	3	GEL		
	General Elective	3	GEL		
	General Elective	3	GEL		
	TOTAL CREDIT HOURS	13.5	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	PC		
CHEM 482	Chemistry Seminar	0.5	DPR		
CHEM 432	Biochemistry II	3	PC		
	General Elective	3	GEL		
	TOTAL CREDIT HOURS	13.5	TERM GPA:		

Comments:

TOTAL HOURS: 122 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: _____