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

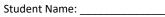
CHEMISTRY

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:	1	11				

Degree Map: Catalog 2022-2023





J-Number:____

CKSON STATE UNIVERSITY*

Entering Term: _____

COLLEGE OF

Expected Graduation Date: _____

SCIENCE, ENGINEERING, AND TECHNOLOGY
CHEMISTRY

Advisor:		CHEMISTRY		Pathway:	
	CONCENTR	RATION: BIOMED			
	FRESHM	AN 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 & PHYL 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 & PHYL 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	РС			
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.