

Bachelor of Arts in Computer Science Plus BS in Chemistry dual degree

Courses needed for BACS		
Core General Education (24 credit hours)	Credits	Notes
ENGL 1020 Core Composition I	3	
ENGL 2030 Core Composition II	3	
Social Science	3	
Behavioral Science	3	
Humanities	3	
Arts	3	
Cultural Diversity	3	
International Perspectives	3	
Math (Calc 1 & MATH 2000+)		
MATH 1401 Calculus I	4	Counts for Chemistry reqmnt
MATH 2411 - Calculus II	4	Counts for Chemistry reqmnt
Science (8 credit hours) A sequence of 2 Natural or Physical Sciences with lab		
General Chemistry I and lab (CHEM 2031 and 2038)	4	Counts for Chemistry reqmnt
General Chemistry II with lab (CHEM 2061 and CHEM 2068)	5	Counts for Chemistry reqmnt
CS Core (22 credit hours)		
CSCI 1410 Fundamentals of Computing	3	
CSCI 1411 Fundamentals of Computing Lab	1	
CSCI 2312 Object-Oriented Programming	3	
CSCI 2421 Data Structures & Programming Design	3	
CSCI 2511 Discrete Structures	3	
CSCI 3287 Database Systems	3	
CSCI 3412 Algorithms	3	
CSCI 3508 Introduction to Software Engineering	3	
CS Technical Electives (21 credit hours)		
CS Elective	3	
CS Elective	3	
CS Elective	3	
CS Elective	3	
CS Elective	3	
CS Elective	3	
CS Elective	3	
Free Electives (38 credit hours) Students Area of Concentration		Fulfilled by "Plus Chemistry" dual degree component below
Courses needed for BS in Chemistry dual major component		
Additional Math		
Math 2421 Calculus III		Prereq for Physical Chemistry
Chemistry Core (44 credit hours)		
General Chemistry I and lab (CHEM 2031 and 2038)		Satisfied above
General Chemistry II with lab (CHEM 2061 and CHEM 2068)		Satisfied above
Analytical Chemistry with lab (CHEM 3111 and CHEM 3118)	5	Counts for CS free elective
Organic Chemistry I with lab (CHEM 3411 and CHEM 3418)	5	Counts for CS free elective
Organic Chemistry II with lab (CHEM 3421 and CHEM 3498)	5	Counts for CS free elective
CHEM 4521 - Physical Chemistry: Quantum and Spectroscopy	3	Counts for CS free elective
CHEM 4538 - Physical Chemistry Laboratory: Molecular Structure	2	Counts for CS free elective
CHEM 4511 - Physical Chemistry: Thermodynamics and Kinetics	3	Counts for CS free elective
CHEM 4518 - Physical Chemistry Laboratory: Reaction Analysis	2	Counts for CS free elective
CHEM 3011 - Inorganic Chemistry	3	Counts for CS free elective
Instrumental Analysis with lab (CHEM 4121 and CHEM 4128)	5	Counts for CS free elective
Chemistry Lab Elective (Inorganic Lab or Biochem lab CHEM 3018 or 4828)	2	Counts for CS free elective
Chemistry Ancillary Sequence (13-14 credit hours)		
Sequence A or B (13-14 credits)	14	
College of Liberal Arts and Sciences Requirements (22 credit hours)		
CLAS Communicative Skills	3	Counts for CS free elective
CLAS Foreign Language	10	Counts for CS free elective
CLAS Humanities	3	Counts for CS free elective
CLAS Behavioral Sciences	3	Counts for CS free elective
CLAS Social Sciences	3	Counts for CS free elective
Total Credits for BACS Plus BS Chemistry dual major	155	
Minimum Credits to Dual BA in CS and BS in Chemistry Degree		

Note: This checklist was created based on 2019-20 catalog year requirements. See your advisor to create your CS+ plan of study.