

Chemistry, B.S.

2023-24 Catalog

Academic Advising Center 2nd Floor Lanier Hall 478-445-2361 advising@gcsu.edu

This example plan is designed to provide a blueprint for students to complete their degrees within four years. It includes recommended sequences of courses. Individual plans will vary based on previously earned credit, such as Dual Enrollment and AP credit, as well as the student's academic goals. Students will work with an academic advisor to develop a more individualized plan to complete their degree.

This example four-year plan is applicable to students admitted during the 2023–24 academic year.

Total credits required: 120 credits

Required GPA for graduation: 2.0 (institutional)

Students must maintain a 2.0 GPA over the 44–59 hours used to satisfy Area F and major requirements.

Courses requiring a C or better are denoted with an asterisk (*). Courses only offered in the fall semester are denoted with a plus sign (+). Courses only offered in the spring semester are denoted with a double-plus sign (++).

Legend is available on the last page of this document.

Year 1							
	Fall	Spring					
Course	Title	Hours	Area	Course	Title	Hours	Area
CHEM 0001	First-Year Academic Seminar	1		ENGL 1102	English Composition II	3	Α
ENGL 1101*	English Composition I (pre-req to ENGL 1102)	3	А	GC1Y 1000	Critical Thinking (pre-req to GC2Y 2000)	3	В
CHEM 1311+ CHEM 1311L+	Principles of Chemistry for Majors I & Lab (pre-reqs for CHEM 1312/1312L)	4	F	CHEM 1312++ CHEM 1312L++	Principles of Chemistry for Majors II & Lab (pre-reqs to CHEM 2800 and 3010)	4	F
MATH 1113*	Pre-Calculus (pre-req to MATH 1261)	3	А	MATH 1261*	Calculus I (pre-req to MATH 1262)	4	F
Core Area C	Humanities and Ethics (student's choice)	3	С				
Semester Hours		14		Semester Hours		14	
Summer	Summer is a good time to get ahead	on cour	ses. Sev	eral core course	s are offered online over the summe	er terms.	
Notes:	Area A and GC1Y 1000 must be completed by 30 earned hours. First-Year Academic Seminar is a graduation requirement and impacts a student's GPA; however, it does not count toward the minimum of 120 semester hours required for a degree.						

Year 2							
	Fall	Spring					
Course	Title	Hours	Area	Course	Title	Hours	Area
CHEM 2920+	Chemistry Seminar	1	Major	GC2Y 2000	Global Perspectives	4	В
CHEM 3361 CHEM 3361L	Organic Chemistry I & Lab (pre-reqs to CHEM 3362/3362L and 3510)	4	Major	CHEM 3362 CHEM 3362L	Organic Chemistry II & Lab (pre-reqs to CHEM 3600L and 3711/3711L)	4	Major
MATH 1262	Calculus II (pre-req to PHYS 2212/2212L)	4	F	PHYS 2212 PHYS 2212L	Principles of Physics II & Lab (pre-reqs to CHEM 4211)	4	F
PHYS 2211 PHYS 2211L	Principles of Physics I (pre-reqs to PHYS 2212/2212L)	4	F	Core Area E	Social Science (student's choice)	3	E
Core Area C	Fine Arts (student's choice)	3	С				
Semester Hours		16			Semester Hours	15	
Notes:	GC2Y 2000 must be taken between 3	30–59 ea	arned ho	ours.			

Year 3							
	Fall	Spring					
Course	Title	Hours	Area	Course	Title	Hours	Area
CHEM 3920+	Chemistry Seminar I	1	l l\/laı∩r	CHEM 3200++ CHEM 3200L++	Instrumental Analysis & Lab	4	Major
CHEM 2800 CHEM 2800L	Quantitative Analysis & Lab (pre-reqs to CHEM 3200 & 3400)	4	F	CHEM 3600L++	Structural Chemistry	2	Major
CHEM 3010+ CHEM 3010L+	Inorganic Chemistry & Lab	4	,	CHEM 4212++ CHEM 4212L++	Physical Chemistry II & Lab	4	Major/ Capstone
CHEM 4211+	Physical Chemistry I (pre-req to CHEM 4212)	3	Major	Core Area E	Social Science (student's choice)	3	E
Lang 1001	World Language I (1001-level)	3	Elective	Lang 1002	World Language II (1002-level)	3	Foreign Lang
	Semester Hours 15			Semester Hours	16		
CHEM 3010L in fall of Year 3 may be substituted by CHEM 3711L in fall of Year 4. Either CHEM 3200L or CHEM 4212L in spring of Year 3 may be substituted by CHEM 4211L in fall of Year 3. Students must complete a world language course at the 1002 level or higher. Complete the WebCAPE exam to determine placement for first course. General electives can be in any discipline and any level (1000–4999).							

Year 4									
	Fall	Spring							
Course	Title	Hours	Area	Course	Title	Hours	Area		
CHEM 3711+	Biochemistry I	3	Major	CHEM 4920++	Chemistry Seminar II	1	Major		
CHEM or	Capstone course	3	Capstone	CHEM or	Capstone course	3	Capstone		
PHYS Course	(see DegreeWorks for options)			PHYS Course	(see DegreeWorks for options)				
CHEM 4999	Independent Study: Research	3			Social Science (student's choice)	3	Е		
CHEW 4999	(pre-req to CHEM 4920)								
Gen Elective	Any general elective course	3	Elective	Gen Elective	Any general elective course	3	Elective		
Gen Elective	Any general elective course	3	Elective	Gen Elective	Any general elective course	3	Elective		
				Gen Elective	Any general elective course	3	Elective		
Semester Hours		15		Semester Hours		16			
Notes	Visit graduate schools or apply for jobs during this year.								
Notes:	General electives can be in any discipline and any level (1000–4999).								

	Legend					
Area	This section of the plan references the area of the curriculum the course fulfills.					
Α	Core Area A: Essential Skills					
В	B Core Area B: Institutional Options					
С	Core Area C: Humanities, Ethics, and Fine Arts					
D	Core Area D: Science, Technology, and Math					
E	Core Area E: Social Sciences					
F	Core Area F: Major Directed Core Requirements					
Major	Chemistry Major Requirements					
Capstone	Capstone Experience: A culmination of everything the student has learned in the program.					
	Course(s) a student selects. Hours are needed to meet overall graduation hours. Number of electives varies per major.					
Elective Electives can be used towards GC Journeys, minors, or professional/graduate school pre-requisites, or to take cour						
interest.						