

BACHELOR OF SCIENCE, MAJOR IN CHEMISTRY FOR OTHER TECHNICAL CAREERS

Bachelor of Science, Major in Chemistry for Other Technical Careers

Core Curriculum (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum)

Component Area I (Communication)		6
Component Area II (Mathematics) ¹		4
Component Area III (Life and Physical Sciences) ²		8
Component Area IV (Language, Philosophy, and Culture)		3
Component Area V (Creative Arts)		3
Component Area VI (American History)		6
Component Area VII (Government/Political Science)		6
Component Area VIII (Social and Behavioral Sciences)		3
Component Area IX (Area IV elective or Oral Communication)		3
Degree Specific Requirements		
MATH 1420	Calculus I ¹	4
MATH 1430	Calculus II	4
PHYS 1301 & PHYS 1101	General Phy-Mechanics & Heat and General Physics Laboratory I	4
PHYS 1302 & PHYS 1102	Gen Phy-Snd,Lght, Elec, & Mag and General Physics Laboratory II	4
ENGL 3330	Intro To Technical Writing	3
Major Core		
Major		
CHEM 1411	General Chemistry I ²	4
CHEM 1412	General Chemistry II ²	4
CHEM 2323 & CHEM 2123	Organic Chemistry I: Lecture and Organic Chemistry I Lab	4
CHEM 2325 & CHEM 2125	Organic Chemistry II: Lecture and Organic Chemistry II: Lab	4
CHEM 2401	Quantitative Analysis	4
CHEM 4448	Physical Chemistry I	4
CHEM 4440	Instrumental Analytical Chem	4
CHEM 4260	Advanced Integrated Laboratory	2
CHEM 4367	Advanced Inorganic Chemistry	3
CHEM 4100	Chemical Literature Seminar	1
CHEM 4395	Undergrad Research In Chem	3
CHEM Advanced elective ³		3-4
Minor (if required)		
A minor, including 6 advanced hours is required ⁴		18
Electives		
General electives		8
Advanced electives		12-13
Total Hours		120-128

¹ MATH 1420 satisfies the Component Area II requirement, the 1 hour institutional component, and the degree specific requirement.

² CHEM 1411 and CHEM 1412 satisfy the Component Area III requirement and the degree specific requirement.

³ CHEM 3361, CHEM 3367, CHEM 3368, CHEM 3438, CHEM 4442, and CHEM 4443 are recommended.

⁴ A minor in MATH, for instance, only requirements 10 additional hours beyond MATH 1420 and MATH 1430.

Note

A minor generally requires six semesters of coursework, a minimum of 18 credits (six advanced) in an approved field. Students should use elective and minor hours to satisfy the 42 advanced hour requirement.

First Year

Fall	Hours Spring	Hours
CHEM 1411 ¹	4 CHEM 1412 ¹	4
MATH 1420 ²	4 MATH 1430	4
ENGL 1301 ³	3 ENGL 1302 ³	3
HIST 1301 ⁴	3 HIST 1302 ⁴	3
UNIV 1301 ⁵	3	
	17	14

Second Year

Fall	Hours Spring	Hours
CHEM 2323	3 CHEM 2325	3
CHEM 2123	1 CHEM 2125	1
PHYS 1301	3 PHYS 1302	3
PHYS 1101	1 PHYS 1102	1
CHEM 2401	4 Minor ⁶	4
Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv)	3 ENGL 3330	3
	15	15

Third Year

Fall	Hours Spring	Hours
CHEM 4448	4 CHEM Advanced Elective ⁸	3-4
Elective (Advanced)	4 Elective (Advanced)	3
POLS 2305 ⁷	3 POLS 2306 ⁷	3
Elective	2 Elective	3
Minor (Advanced) ⁶	3 Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	3
	16	15

Fourth Year

Fall	Hours Spring	Hours
CHEM 4440	4 CHEM 4260	2
CHEM 4100	1 CHEM 4367	3
Elective (Advanced)	3 CHEM 4395	3
Minor (Advanced) ⁶	3 Component Area V (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3
Component Area VIII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)	3 Elective (Advanced)	3
	14	14

Total Hours: 120

¹ Satisfies Component Area III

² Satisfies Component Area II

³ Satisfies Component Area I

⁴ Satisfies Component Area VI

⁵ or an elective

⁶ a minor requires 6 semester hours of coursework, a minimum of 18 credits (6 advanced) in an approved field

⁷ Satisfies Component Area VII

⁸ CHEM 3361, CHEM 3367, CHEM 3368, CHEM 3438, CHEM 3339, CHEM 4442, CHEM 4443 are recommended

Note: Students should use elective and minor hours to satisfy the 42-advanced hour requirement. Advanced hours are 3000 and 4000 level courses.