

Bachelor of Science in Chemistry and a Concentration in Chemical Physics	
MAJOR REQUIREMENTS/CHEMISTRY: 33 Credits	Credits
CE111: General Chemistry I	3.0
CE111L: General Chemistry I Lab	1.0
CE112: General Chemistry II	3.0
CE112L: General Chemistry II Lab	1.0
CE221: Quantitative Analysis	3.0
CE221L: Quantitative Analysis Lab	2.0
CE241: Organic Chemistry I	3.0
CE241L: Organic Chemistry I Lab	2.0
CE242: Organic Chemistry II	3.0
CE242L: Organic Chemistry II Lab	2.0
CE311: Chemical Literature	1.0
CE322: Instrumental Analysis	3.0
CE322L: Instrumental Analysis Lab	1.0
CE372: Phys. Chem: Intro. to Spectroscopy & Quantum Chemistry	3.0
CE372L: Phys. Chem: Intro. to Spectroscopy & Quantum Chemistry Lab	1.0
CE410: Seminar	1.0
CONCENTRATION REQUIREMENTS/CHEMICAL PHYSICS: 13 Credits	Credits
CE371: Biophysical Chemistry: Thermodynamics, Dynamics, and Chemical Kinetics	3.0
CE371L: Biophysical Chemistry: Thermodynamics, Dynamics, and Chemical Kinetics Lab	1.0
CE475: Computational Chemistry and Molecular Modeling	3.0
PH301: Modern Physics*	3.0
PH302: Applied Physics*	3.0
<i>*Offered in alternative years; care in scheduling is required.</i>	
REQUIREMENTS OUTSIDE MAJOR: 25 Credits	Credits
MA125: Calculus with Analytic Geometry I	4.0
MA126: Calculus with Analytic Geometry II	4.0
MA211: Differential Equations	3.0
MA225: Calculus with Analytic Geometry III	4.0
PH211: General Physics and Calculus I	4.0
PH211L: General Physics and Calculus I Lab	1.0
PH212: General Physics and Calculus I	4.0
PH212L: General Physics with Calculus II Lab	1.0
FREE ELECTIVES: 21 Credits *	Credits
	21.0
<p><i>*By careful choice of electives, the BS in Chemistry and a Concentration in Biochemistry can meet the requirements for American Chemical Society Certification. Students wishing to graduate with an ACS certified degree must take CE310, CE401, CE401L, and CE452 for a total of 11 credits, and apply to the Department Chair.</i></p> <p><i>See the curriculum chart for BS in Chemistry and a Concentration in Advanced Chemistry option.</i></p>	

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GENERAL EDUCATION REQUIREMENTS: 36 Credits		Credits
First Year Seminar	FY-101: First Year Seminar *(Select Section "CE")	3.0
Reading and Writing	EN101: College Composition I	3.0
	EN102: College Composition II	3.0
Mathematics	Fulfilled in Outside Major Requirements with MA125 or MA126	0.0
Natural Sciences	Fulfilled in Major Requirements with required CE and BY courses	0.0
Literature	3 Credits from courses designated with Course*Type: LIT	3.0
Aesthetics and Creativity	3 Credits from Art, Music, Theatre, or Dance	3.0
Technological Literacy	IT102: Information Technology for Scientists	3.0
Reasoned Oral Discourse	Fulfilled in Major Requirements with required CE410	0.0
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0
Social Science	3 Credits from courses designated with Course*Type: SS.SV	3.0
Historical Perspective/Social Sciences	3 Credits from courses designated with Course*Type: HS.SV or 3 Credits from courses designated with Course*Type: SS.SV	3.0
Interdisciplinary Perspectives	3 Credits from courses designated with Course*Type: ISP	3.0
Cultural Diversity and Global Understanding or Foreign Language	3 Credits from courses designated with Course*Type: CD and 3 Credits from courses designated with Course*Type: GU or 6 Credits from the SAME foreign language	6.0
Experiential Education	One course designated with Course*Type: EX	0.0
Writing Intensive	Two courses from Chemistry (CE) designated with Course*Type: WT	0.0
		0.0

Minimum Credits for Bachelor of Science in Chemistry and a Concentration in Chemical Physics = 128.0

NOTES:

* 58 credits must be completed at the 200 level or higher.