

Bachelor of Science in Chemistry and a Concentration in Chemical Physics		
MAJOR REQUIREMENTS/CHEMISTRY: 32 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	2.0
	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: 22 Credits *		Credits
	_____	22.0
<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	3.0
	or 3 Credits from courses designated with Course*Type: SS.SV	
Interdisciplinary Perspectives	3 Credits from courses designated with Course*Type: ISP	3.0
Cultural Diversity/Global Understanding	3 Credits from courses designated with Course*Type: CD	6.0
	3 Credits from courses designated with Course*Type: GU	
or 6 Credits from the SAME foreign language		
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

**Total Credits for Bachelor of Science in Chemistry and a Concentration in Chemical Physics = 128**

**NOTES:**

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