Bachelor of Science in Chemistry and a Concentration in Chemical Physics		
JOR REQUIREMENTS/CHEMI	STRY: 33 Credits	Credits
	CE-111: General Chemistry I	3.0
	CE-111L: General Chemistry I Lab	1.0
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	CE-112: General Chemistry II	3.0
	CE-112L: General Chemistry II Lab	1.0
	CE-221: Quantitative Analysis	3.0
	CE-221L: Quantitative Analysis Lab	2.0
	CE-241: Organic Chemistry I	3.0
	CE-241L: Organic Chemistry I Lab	2.0
	OL-241L. Organic Orientistry I Lab	2.0
	CE-242: Organic Chemistry II	3.0
	CE-242L: Organic Chemistry II Lab	2.0
	CE-322: Instrumental Analysis	3.0
	CE-322L: Instrumental Analysis Lab	1.0
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	CE-341: Physical Chemistry I	3.0
	CE-341L: Physical Chemistry I Lab	1.0
	CE-311: Chemical Literature	1.0
	CE-410: Seminar	1.0
NCENTRATION REQUIREMEN	NTS/CHEMICAL PHYSICS: 13 Credits	Credits
	CE-342: Physical Chemistry II	3.0
	CE-342L: Physical Chemistry II Lab	1.0
	CE-475: Computational Chemistry and Molecular Modeling	3.0
	PH-301: Modern Physics*	3.0
	PH-302: Theoretical Physics*	3.0
	*Offered in alternative years; care in scheduling is required.	
ERDISCIPLINARY REQUIREMENTS: 25 Credits		
ERDISCIPLINARY REQUIREN	MENTS: 25 Credits	Credits
ERDISCIPLINARY REQUIREM	MENTS: 25 Credits	Credits
ERDISCIPLINARY REQUIREM	MENTS: 25 Credits  MA-125: Calculus with Analytic Geometry I	
ERDISCIPLINARY REQUIREM		4.0
ERDISCIPLINARY REQUIREN	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II	4.0 4.0
ERDISCIPLINARY REQUIREM	MA-125: Calculus with Analytic Geometry I	4.0 4.0 3.0
ERDISCIPLINARY REQUIREN	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II  MA-211: Differential Equations MA-225: Calculus with Analytic Geometry III	4.0 4.0 3.0 4.0
ERDISCIPLINARY REQUIREM	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II  MA-211: Differential Equations MA-225: Calculus with Analytic Geometry III  PH-211: General Physics with Calculus I	4.0 4.0 3.0 4.0
ERDISCIPLINARY REQUIREM	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II  MA-211: Differential Equations MA-225: Calculus with Analytic Geometry III	4.0 4.0 3.0
ERDISCIPLINARY REQUIREM	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II  MA-211: Differential Equations MA-225: Calculus with Analytic Geometry III  PH-211: General Physics with Calculus I	4.0 4.0 3.0 4.0
ERDISCIPLINARY REQUIREM	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II  MA-211: Differential Equations MA-225: Calculus with Analytic Geometry III  PH-211: General Physics with Calculus I PH-211L: General Physics with Calculus I Lab	4.0 4.0 4.0 4.0 4.0
	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II  MA-211: Differential Equations MA-225: Calculus with Analytic Geometry III  PH-211: General Physics with Calculus I PH-211L: General Physics with Calculus I Lab  PH-212: General Physics with Calculus I	4.0 4.0 4.0 4.0 1.0 4.0
	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II  MA-211: Differential Equations MA-225: Calculus with Analytic Geometry III  PH-211: General Physics with Calculus I PH-211L: General Physics with Calculus I Lab  PH-212: General Physics with Calculus I	4.0 4.0 4.0 4.0 1.0 Credits
ERDISCIPLINARY REQUIREM	MA-125: Calculus with Analytic Geometry I MA-126: Calculus with Analytic Geometry II  MA-211: Differential Equations MA-225: Calculus with Analytic Geometry III  PH-211: General Physics with Calculus I PH-211L: General Physics with Calculus I Lab  PH-212: General Physics with Calculus I	4.0 4.0 4.0 4.0 1.0 4.0

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. See the curriculum chart for BS in Chemistry and a Concentration in Advanced Chemistry option.

## Bachelor of Science in Chemistry and a Concentration in Chemical Physics Credits **GENERAL EDUCATION REQUIREMENTS: 36 Credits** First Year Seminar FY-101: First Year Seminar \*(Select Section "CE") 3.0 Reading and Writing EN-101: College Composition I 3.0 EN-102: College Composition II 3.0 Mathematics Fulfilled in Interdisciplinary Requirements with MA-125 or MA-126 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 IT-102: Information Technology for Scientists 3.0 Reasoned Oral Discourse Fulfilled in Major Requirements with required CE-410 0.0 Historical Perspective 3 Credits from courses designated with Course\*Type: HS.SV 3.0 3 Credits from courses designated with Course\*Type: SS.SV 3.0 Social Science Historical Perspective/Social 3 Credits from courses designated with Course\*Type: HS.SV 3.0 Sciences or 3 Credits from courses designated with Course\*Type: SS.SV Interdisciplinary Perspectives 3 Credits from courses designated with Course\*Type: ISP 3.0 3 Credits from courses designated with Course\*Type: CD Cultural Diversity and Global 6.0 Understanding and 3 Credits from courses designated with Course\*Type: GU or Foreign Language 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

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

## NOTES:

<sup>\* 58</sup> credits must be completed at the 200 level or higher.