

Bachelor of Science in Chemistry and Education with Endorsement in Elementary Education

MAJOR REQUIREMENTS/CHEMISTRY: 35 Credits (a)		MAJOR REQUIREMENTS/EDUCATION: 30 Credits (b)	
CE111: General Chemistry I	3.0	ED250: Foundations of Teaching & Learning	3.0
CE111L: General Chemistry I Lab	1.0	EDL326: Literacy Instructions in K-5 Educational Settings I	3.0
CE112: General Chemistry II	3.0	ED320: Teaching Students with Diverse Needs	3.0
CE112L: General Chemistry II Lab	1.0	EDL327: Literacy Instruction in K-5 Educational Settings II	3.0
CE221: Quantitative Analysis	2.0	EDL327N: NCATE Assessment	0.0
CE221L: Quantitative Analysis Lab	2.0	ED360: Methods of Teaching Elementary Mathematics	3.0
CE241: Organic Chemistry I	3.0	ED360N: NCATE Assessment	0.0
CE241L: Organic Chemistry I Lab	2.0	ED361: Methods of Teaching Science for Elem School	3.0
CE242: Organic Chemistry II	3.0	ED361N: NCATE Assessment	0.0
CE242L: Organic Chemistry II Lab	2.0	ED362: Teaching Elementary Social Studies	3.0
CE311: Chemical Literature	1.0	ED362N: NCATE Assessment	0.0
CE322: Instrumental Analysis	4.0	• ED-PRAXIS: Education Praxis II	0.0
CE372: Ph Chm: Intro to Spectroscopy & Quantum Chem.	3.0	• PRAXIS - 10014	0.0
CE372L: Ph Chm: Spectroscopy & Quantum Chem. Lab	1.0	9 Credits as Follows:	
CE410: Seminar	1.0	ED416: Student Teaching AND	8.0
3 crs. of CE <i>*(Excluding CE499)</i>		ED416S: Seminar in Student Teaching	1.0
electives CE4xx: _____	3.0	OR	
from level 400+		ED417: Supervised Student Teaching AND	8.0
		ED417S: Seminar - Supervised Student Teaching	1.0
CHEMISTRY OUTSIDE MAJOR REQUIREMENTS: 18 Credits		EDUCATION OUTSIDE MAJOR REQUIREMENTS: 9 Credits	
MA125: Calculus with Analytic Geometry I	4.0	PY103: Introduction to Psychology	3.0
MA126: Calculus with Analytic Geometry II	4.0	PY201: Educational Psychology	3.0
PH211: General Physics and Calculus I	4.0	PY206: Child and Adolescent Development	3.0
PH211L: General Physics w/Calculus I Lab	1.0		
PH212: General Physics w/Calculus II	4.0		
PH212L: General Physics w/Calculus II Lab	1.0		
FREE ELECTIVES: 3 Credits			Credits
			3.0
<p>(a) Students desiring certification by the ACS should enroll in the BS.CE ACS program</p> <p>(b) Minimum grade of "C" required for Education Courses</p>			

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GENERAL EDUCATION REQUIREMENTS: 33 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 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 the Major Requirements with ED320	0.0
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0
Social Science	Fulfilled in Outside Major Requirements with PY103	0.0
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	3.0
	3 Credits from courses designated with Course*Type: GU	3.0
	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
	Two courses from Education (ED, EDL, EDS) designated with	0.0
	Course*Type: WT	0.0

Total Credits for Bachelor of Science in Chemistry and Education with Endorsement in Elementary Education = 128
ADDITIONAL ENDORSEMENTS AVAILABLE: (Please review Endorsement Charts for Requirements) • TSD - Teacher of Students with Disabilities - Elementary (ELE.TSD.10) • ESL - English as a Second Language - Elementary (ELE.ESL.10) • P-3 Early Childhood Endorsement (ELE.P3.10) • MID-SCI - Middles School Science (MID.SCI.10) • Teacher of Supplemental Instruction in Reading/Mathematics K-8 (ELE.READ.MATH.10)

NOTES:

- * 58 credits must be completed at the 200 level or higher.
- ** Education majors are required to have an overall GPA of 2.75 for State Certification.
- ***By state regulation, all Education Majors seeking content area endorsement must complete 12+ credits at the 300+ level in the content major.