Bachelor of Science in Chemistry and Education with Endorsement in Secondary Education				
MAJOR REQUIREMENTS/CHEMISTRY: 35 Credits (a)		MAJOR REQUIREMENTS/EDUCATION: 24 Credits (b)		
CE111: General Chemistry I CE111L: General Chemistry I Lab	3.0 1.0	ED250: Foundations of Teaching & Learning	3.0	
CE112: General Chemistry II CE112L: General Chemistry II Lab	3.0 1.0	ED201: Education Psychology EDL206: Child & Adolescent Development	3.0	
CE221: Quantitative Analysis CE221L: Quantitative Analysis Lab	2.0 2.0	ED319: Literacy Across the Secondary Curriculum ED319N: NCATE Assessment	3.0 0.0	
CE241: Organic Chemistry I CE241L: Organic Chemistry I Lab	3.0 2.0	ED320: Teaching Students with Diverse Needs	3.0	
CE242: Organic Chemistry II CE242L: Organic Chemistry II Lab	3.0 2.0	9 Credits as Follows: ED416: Student Teaching AND	8.0	
CE311: Chemical Literature CE322: Instrumental Analysis	1.0 4.0	ED416S: Seminar in Student Teaching OR ED417: Supervised Student Teaching AND ED417S: Seminar - Supervised Student Teaching	1.0 8.0 1.0	
CE372: PH CE:Intro to Spectroscopy & Quantum Chem. CE372L: PH CE:Intro to Spectroscopy & Quantum Chem. Lab	3.0 1.0	EDUCATION METHODS REQUIREMENTS: 6 Credi		
CE410: Seminar in Chemistry 3 crs. of CE electives CE4xx: (Excluding CE499)	1.0	ED369: Teaching Secondary Science, Part I or ED375: Secondary Teaching Methods Part I ED370: Teaching Secondary Science, Part II or ED376: Secondary Teaching Methods Part II	3.0	
from level 400+ CHEMISTRY OUTSIDE MAJOR REQUIREMENTS: 18 Cred	its	ED-PRAXIS: Education Praxis II	0.0	
MA125: Calculus with Analytic Geometry I MA126: Calculus with Analytic Geometry II	4.0 4.0	• PRAXIS - 20245 • PRAXIS - 10435	0.0 0.0	
, ,		EDUCATION OUTSIDE MAJOR REQUIREMENTS: 3 Co	edits	
PH211: General Physics and Calculus I PH211L: General Physics w/Calculus I Lab	4.0 1.0	PY103: Introduction to Psychology	3.0	
PH212: General Physics w/Calculus II PH212L: General Physics w/Calculus II Lab	4.0 1.0			
FREE ELECTIVES: 9 Credits			Credits 9.0	
			9.0	
(a) Students desiring certification by the ACS should enroll in the BS.CE A (b) Minimum grade of "C" required for Education Courses	ACS progran	1		

Bachelor of Science in Chemistry and Education with Endorsement in Secondary Education			
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 EN102: College Composition II	3.0 3.0	
Mathematics	Fulfilled in Chemistry Outside Major Requirements w/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 Education Major Requirements with ED320	0.0	
Historical Perspective	3 Credits from courses designated with Course*Type: HS.SV	3.0	
Social Science	Fulfilled in Education Outside Major Requirements with PY103	0.0	
Historical Perspective/Social Sciences	3 Credits from courses designated with Course*Type: HS.SV 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/Global Understanding or	3 Credits from courses designated with Course*Type: CD 3 Credits from courses designated with Course*Type: GU 6 Credits from the SAME foreign language	3.0 3.0	
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	
	Two courses from Education (ED, EDL, EDS) designated with Course*Type: WT	0.0 0.0	

Total Credits for Bachelor of Science in Chemistry and Education with Endorsement in Secondary Education = 128

ADDITIONAL ENDORSEMENTS AVAILABLE:

(Please review Endorsement Charts for Requirements)

• TSD - Teacher of Students with Disabilities - Secondary (EDS.TSD.10) 15 Credits

• ESL - English as a Second Language - Secondary (EDS.ESL.10) 12 Credits

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.