Bachelor of Science in Chemistry and Education with Endorsement in Elementary Education MAJOR REQUIREMENTS/CHEMISTRY: 36 Credits (a) MAJOR REQUIREMENTS/EDUCATION: 36 Credits (b) CE111: General Chemistry I 3.0 EDL201: Educational Psychology 3.0 CE111L: General Chemistry I Lab 1.0 CE112: General Chemistry II 3.0 CE112L: General Chemistry II Lab EDL206: Child and Adolescent Development 1.0 3.0 3.0 CE221: Quantitative Analysis CE221L: Quantitative Analysis Lab 2.0 ED250: Foundations of Teaching and Learning 3.0 CE241: Organic Chemistry I 3.0 CE241L: Organic Chemistry I Lab 2.0 CE242: Organic Chemistry II 3.0 EDL326: Literacy Instructions in K-6 3.0 CE242L: Organic Chemistry II Lab Educational Settings I 2.0 CE311: Chemical Literature 1.0 CE322: Instrumental Analysis 3.0 ED320: Teaching Students with Diverse Needs 3.0 CE322L: Instrumental Analysis Lab 1.0 3.0 CE341: Physical Chemistry I CE341L: Physical Chemistry I Lab 1.0 EDL327: Literacy Instruction in K-6 3.0 Educational Settings II CE410: Seminar 1.0 Take 3 Credits of Chemistry (CE) 400+ level 3.0 ED360: Methods of Teaching Elementary 3.0 CE4xx: (Excluding CE499) Mathematics **OUTSIDE MAJOR REQUIREMENTS/CHEM: 18 Credits** MA125: Calculus with Analytic Geometry I 4.0 ED361: Methods of Teaching Science for 3.0 MA126: Calculus with Analytic Geometry II 4.0 Elementary School PH211: General Physics and Calculus I 4.0 PH211L: General Physics w/Calculus I Lab 1.0 ED362: Teaching Elementary Social Studies 3.0 PH212: General Physics w/Calculus II 4.0 9 Credits as Follows (c): ED416: Student Teaching AND 8.0 PH212L: General Physics w/Calculus II Lab 1.0 ED416S: Seminar in Student Teaching 1.0 FREE ELECTIVES: 2 Credits Credits 2.0 (a) Students desiring certification by the ACS should enroll in the BS.CE ACS program (b) Minimum grade of "C" required for Education Courses

(c) Students must complete the appropriate test requirement(s) with a passing score PRIOR to Student Teaching.

MONMOUTH UNIVERSITY CURRICULUM CHART

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

ENERAL EDUCATION REQUIREMENTS: 3	6 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 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	3 Credits from courses designated with Course*Type: SS.SV	3.0
Historical	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/Global Understanding	3 Credits from courses designated with Course*Type: CD 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
	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 Elementary Education = 128.0

ADDITIONAL ENDORSEMENTS AVAILABLE:

• TSD - Teacher of Students with Disabilities - Elementary
• MID-SCI - Middle School Science
• ESL - English as a Second Language - Elementary
• P-3 Early Childhood Endorsement

NOTES:

- * 58 credits must be completed at the 200 level or higher.
- ** Education majors are required to have an overall GPA of 3.00 for State Certification.
- ***By state regulation, all Education Majors seeking content area endorsement must complete 30 content credits (12+ credits at the 300+ level).