

Bachelor of Science in Mathematics and Education with Endorsement in Elementary Education			
MAJOR REQUIREMENTS/MATHEMATICS: 43 Credits		MAJOR REQUIREMENTS/EDUCATION: 30 Credits (a)	
MA120: Intro to Mathematical Reasoning	4.0	ED250: Foundations of Teaching & Learning	3.0
MA125: Calculus with Analytic Geometry I	4.0	EDL326: Literacy Instructions in K-5 Educational Settings I	3.0
MA126: Calculus with Analytic Geometry II	4.0	ED320: Teaching Students with Diverse Needs	3.0
MA211: Differential Equations	3.0	EDL327: Literacy Instruction in K-5 Educational Settings II	3.0
MA221: Linear Algebra	3.0	EDL327N: NCATE Assessment	0.0
MA225: Calculus with Analytic Geometry III	4.0	ED360: Methods of Teaching Elementary Mathematics	3.0
MA314: Number Theory	3.0	ED360N: NCATE Assessment	0.0
MA319: Probability and Statistics I	3.0	ED361: Methods of Teaching Science for Elem School	3.0
MA320: Probability and Statistics II	3.0	ED361N: NCATE Assessment	0.0
MA410: Modern Algebra	3.0	ED362: Teaching Elementary Social Studies	3.0
MA415: Real Analysis	3.0	ED362N: NCATE Assessment	0.0
<b>Take 2 courses from among:</b>		ED-PRAXIS: Education Praxis II	0.0
MA317: Geometry		• PRAXIS - 10014	0.0
<b>or</b> MA411: Abstract Algebra		<b>9 Credits as Follows:</b>	
<b>or</b> MA413: Complex Analysis	3.0	ED416: Student Teaching <b>AND</b>	8.0
<b>or</b> MA419: Introduction to Math Modeling	3.0	ED416S: Seminar in Student Teaching	1.0
MA LVL1: Gateway Exam 1	0.0	<b>OR</b>	
MA LVL2: Gateway Exam 2	0.0	ED417: Supervised Student Teaching <b>AND</b>	8.0
MA LVL3: Gateway Exam 3	0.0	ED417S: Seminar - Supervised Student Teaching	1.0
<b>MATHEMATICS OUTSIDE MAJOR REQUIREMENTS: 11 to 14 Credits</b>		<b>EDUCATION OUTSIDE MAJOR REQUIREMENTS: 9 to 12 Credits</b>	
CS175: Introduction to Computer Science I	3.0	PY103: Introduction to Psychology	3.0
<b>or</b> MA237: Programming & Technology	4.0	PY201: Educational Psychology	3.0
<b>Complete one of the following groups:</b>		PY206: Child and Adolescent Development	3.0
<b>Group A - (8 credits):</b>		MA317: Geometry *(May be fulfilled in major requirements)	0.0 - 3.0
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		
<b>OR</b>			
<b>Group B - (10 credits):</b>			
PH211: General Physics w/Calculus I	4.0		
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		
<b>OR</b>			
<b>Group C - (8 credits):</b>			
BY109: Intro to Biodiversity and Evolution	4.0		
BY110: Intro to Cell & Molecular Biology	4.0		
<b>FREE ELECTIVES: 0.0 -5.0 Credits</b>			<b>Credits</b>
			0.0 -5.0
<i>(a) Minimum grade of "C" required for Education Courses</i>			

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GENERAL EDUCATION REQUIREMENTS: 30 to 33 Credits		Credits
First Year Seminar	FY-101: First Year Seminar	3.0
Reading and Writing	EN101: College Composition I	3.0
	EN102: College Composition II	3.0
Mathematics	Fulfilled in Major Requirements with required MA courses	0.0
Natural Sciences	Fulfilled in Outside Major Requirements with BY, CE, PH courses	0.0
Literature	3 Credits from courses designated with Course*Type: LIT	3.0
Aesthetics and Creativity	3 Credits from subject MU, AR, TH, DA	3.0
Technological Literacy	3 Credits from courses designated with Course*Type: TL <i>*(May be fulfilled in Major Requirements with MA237)</i>	0.0 - 3.0
Reasoned Oral Discourse	Fulfilled in Major Requirements with ED320, and/or MA314	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 Mathematics (MA) designated with Course*Type: WT	0.0
		0.0
	Two courses from Education (ED, EDL, EDS) designated with Course*Type: WT	0.0

<b>Total Credits for Bachelor of Science in Mathematics and Education with Endorsement in Elementary Education = 128</b>
<p><b>ADDITIONAL ENDORSEMENTS AVAILABLE:</b>                  (Please review Endorsement Charts for Requirements)</p> <ul style="list-style-type: none"> <li>• TSD - Teacher of Students with Disabilities - Elementary (ELE.TSD.10)</li> <li>• ESL - English as a Second Language - Elementary (ELE.ESL.10)</li> <li>• MID-MA - Middle School Mathematics (MID.MA.10)</li> <li>• P-3 Early Childhood Endorsement (ELE.P3.10)</li> <li>• Teacher of Supplemental Instruction in Reading/Mathematics K-8 (ELE.READ.MATH.10)</li> </ul>

**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.