

**Bachelor of Science in Mathematics and Education with Endorsement in Secondary Education**

**MAJOR REQUIREMENTS/MATHEMATICS: 43 Credits**      **MAJOR REQUIREMENTS/EDUCATION: 24 Credits (a)**

MA120: Intro to Mathematical Reasoning      4.0 MA125: Calculus with Analytic Geometry I      4.0 MA126: Calculus with Analytic Geometry II      4.0 MA211: Differential Equations      3.0 MA221: Linear Algebra      3.0 MA225: Calculus with Analytic Geometry III      4.0 MA314: Number Theory      3.0 MA319: Probability and Statistics I      3.0 MA320: Probability and Statistics II      3.0 MA410: Modern Algebra      3.0 MA415: Real Analysis      3.0  <b>Take 2 courses from among:</b> MA317: Geometry or MA411: Abstract Algebra or MA413: Complex Analysis      3.0 or MA419: Introduction to Math Modeling      3.0  MA LVL1: Gateway Exam 1      0.0 MA LVL2: Gateway Exam 2      0.0 MA LVL3: Gateway Exam 3      0.0		ED250: Foundations of Teaching and Learning      3.0  EDL201: Educational Psychology      3.0  EDL206: Child and Adolescent Development      3.0  ED319: Literacy Across the Secondary Curriculum      3.0  ED320: Teaching Students with Diverse Needs      3.0  <b>9 Credits as Follows (b):</b> ED416: Student Teaching <b>AND</b> 8.0 ED416S: Seminar in Student Teaching      1.0	
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**OUTSIDE MAJOR (MA) REQUIREMENTS: 11 to 14 Credits**      **EDUCATION METHODS REQUIREMENTS: 6 Credits (a)**

CS175: Introduction to Computer Science I      3.0 or MA237: Programming & Technology in Mathematics      4.0  <b>Complete one of the following groups:</b> <b>Group A - (8 credits):</b> 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* 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* Group C - (8 credits):</b> BY109: Intro to Biodiversity and Evolution      4.0 BY110: Intro to Cell & Molecular Biology      4.0 BY110: Intro to Cell & Molecular Biology      4.0		ED365: Teaching Secondary Math Part I      3.0 <b>*OR*</b> ED375: Secondary Teaching Methods Part I  ED366: Teaching Secondary Math Part II      3.0 <b>*OR*</b> ED376: Secondary Teaching Methods Part II	
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**OUTSIDE MAJOR (ED) REQUIREMENTS: 0 to 3 Credits**

MA317: Geometry*      0.0 - 3.0 <i>*May be fulfilled in major requirements</i>			
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**FREE ELECTIVES: 2 to 8 Credits**      **Credits**

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(a) Minimum grade of "C" required for Education Courses  
 (b) Students must complete the appropriate test requirement(s) with a passing score PRIOR to Student Teaching.

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GENERAL EDUCATION REQUIREMENTS: 33 to 36 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 Req. 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 Outside Major Requirements with MA237</i>	0.0 - 3.0
Reasoned Oral Discourse	Fulfilled in Major Requirements with ED320 or MA314	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 Perspective/Social Sciences	3 Credits from courses designated with Course*Type: HS.SV <b>or</b> 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 and Global Understanding or Foreign Language	3 Credits from courses designated with Course*Type: CD	6.0
	<b>and</b> 3 Credits from courses designated with Course*Type: GU	
	<b>or</b> 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
		0.0

**Minimum Credits for Bachelor of Science in Mathematics and Education with Endorsement in Secondary Education = 128.0**

**ADDITIONAL ENDORSEMENTS AVAILABLE:**  
 • TSD - Teacher of Students with Disabilities - Secondary      • ESL - English as a Second Language - Secondary

**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).