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

### MAJOR REQUIREMENTS/MATHEMATICS: 43 Credits
- 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

**Take 2 courses from among:**
- MA317: Geometry
- MA411: Abstract Algebra
- MA413: Complex Analysis 3.0
- MA419: Introduction to Math Modeling 3.0

### Take 2 courses from among:
- MA LVL1: Gateway Exam 1
- MA LVL2: Gateway Exam 2
- MA LVL3: Gateway Exam 3

### OUTSIDE MAJOR (MA) REQUIREMENTS: 11 to 14 Credits
- CS175: Introduction to Computer Science I 3.0
- or MA237: Programming & Technology in Mathematics 4.0

**Complete one of the following groups:**

#### Group A - (8 credits):
- 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

#### "OR" Group B - (10 credits):
- 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

#### "OR" Group C - (8 credits):
- BY109: Intro to Biodiversity and Evolution 4.0
- BY110: Intro to Cell & Molecular Biology 4.0

### FREE ELECTIVES: 2 to 11 Credits

### MAJOR REQUIREMENTS/EDUCATION: 24 Credits (a)
- 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
- ED319N: NCATE Assessment 0.0
- ED320: Teaching Students with Diverse Needs 3.0

### Take 9 Credits as Follows (b):
- ED416: Student Teaching AND ED416S: Seminar in Student Teaching 8.0
- or MA419: Introduction to Math Modeling 3.0

### "OR"
- ED417: Supervised Student Teaching AND ED417S: Seminar - Supervised Student Teaching 8.0

### OUTSIDE MAJOR (ED) REQUIREMENTS: 3 to 6 Credits
- ED365: Teaching Secondary Math Part I
- "OR" ED375: Secondary Teaching Methods Part I 3.0
- ED366: Teaching Secondary Math Part II
- "OR" ED376: Secondary Teaching Methods Part II 3.0

### OUTSIDE MAJOR (ED) REQUIREMENTS: 3 to 6 Credits

### EDUCATION METHODS REQUIREMENTS: 6 Credits (a)
- PY103: Introduction to Psychology 3.0
- MA317: Geometry* 0.0 - 3.0

### "May be fulfilled in major requirements"

**Minimum grade of "C" required for Education Courses**

**Students must complete the appropriate test requirement(s) with a passing score PRIOR to Student Teaching.**
### Bachelor of Science in Mathematics and Education with Endorsement in Secondary Education

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>GENERAL EDUCATION REQUIREMENTS: 30 to 33 Credits</strong></td>
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<tr>
<td>First Year Seminar</td>
<td>3.0</td>
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<tr>
<td>Reading and Writing</td>
<td>3.0</td>
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<tr>
<td>Mathematics</td>
<td>0.0</td>
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<tr>
<td>Natural Sciences</td>
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<tr>
<td>Literature</td>
<td>3.0</td>
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<tr>
<td>Aesthetics and Creativity</td>
<td>3.0</td>
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<tr>
<td>Technological Literacy</td>
<td>0.0 - 3.0</td>
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<tr>
<td>Reasoned Oral Discourse</td>
<td>0.0</td>
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<tr>
<td>Historical Perspective</td>
<td>3.0</td>
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<tr>
<td>Social Science</td>
<td>0.0</td>
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<tr>
<td>Historical Perspective</td>
<td>3.0</td>
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<tr>
<td>or 3 Credits from courses designated with Course*Type: SS.SV</td>
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<tr>
<td>Interdisciplinary Perspectives</td>
<td>3.0</td>
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<tr>
<td>Cultural Diversity and Global Understanding or Foreign Language</td>
<td>6.0</td>
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<tr>
<td>and 3 Credits from courses designated with Course*Type: GU</td>
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<tr>
<td>or 6 Credits from the SAME foreign language</td>
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<tr>
<td>Experiential Education</td>
<td>0.0</td>
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<tr>
<td>Writing Intensive</td>
<td>0.0</td>
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<tr>
<td>Two courses from Mathematics (MA) designated with Course*Type: WT</td>
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</tr>
<tr>
<td>Two courses from Education (ED, EDL, EDS) designated with Course*Type: WT</td>
<td>0.0</td>
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**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.