Bachelor of Arts/Sciences in Mathematics Education

The Bachelor of Arts/Science in Mathematics Education degree has five basic components:

1. General Education & Institutional Requirements
2. Secondary Education Program Requirements
3. Foreign Language Requirement (Bachelor of Arts only)
4. Mathematics Core Requirements
5. Mathematics Program Requirements
6. Secondary Education Program Admission and Professional Requirements

Graduation Requirements (p. 3)

DSU General Education & Institutional Requirements

All DSU General Education and Institutional requirements must be fulfilled. A previously earned degree may fulfill those requirements, but courses must be equivalent to DSU’s minimum General Education standards in American Institutions, English, and Mathematics.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Institutional Requirement in Computer Literacy (<a href="catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a>)</td>
<td>0-6</td>
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<tr>
<td></td>
<td>Computer Literacy</td>
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<tr>
<td></td>
<td>General Education Core Requirements (<a href="catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a>)</td>
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<tr>
<td></td>
<td>English</td>
<td>3-7</td>
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<tr>
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<td>Information Literacy</td>
<td>0-1</td>
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<tr>
<td></td>
<td>Mathematics</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>American Institutions</td>
<td>3-6</td>
</tr>
<tr>
<td></td>
<td>Life Sciences</td>
<td>3-10</td>
</tr>
<tr>
<td></td>
<td>Physical Sciences</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>Laboratory Science</td>
<td>0-1</td>
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<tr>
<td></td>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Literature/Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social &amp; Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Exploration</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>Two (2) Global &amp; Cultural Perspectives Courses</td>
<td>0-6</td>
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</table>

Secondary Education Program Requirements

Complete one of the following through General Education or elective credit:

<table>
<thead>
<tr>
<th>HIST 1700</th>
<th>American Civilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>or POLS 1100</td>
<td>American Government</td>
</tr>
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</table>

Complete one of the following through General Education or elective credit:

<table>
<thead>
<tr>
<th>FSHD 1500</th>
<th>Human Development Lifespan</th>
</tr>
</thead>
<tbody>
<tr>
<td>or PSY 1010</td>
<td>General Psychology</td>
</tr>
<tr>
<td>or PSY 1100</td>
<td>Human Development Through Lifespan</td>
</tr>
</tbody>
</table>

Complete the following program prerequisite courses:

<table>
<thead>
<tr>
<th>EDUC 1010</th>
<th>Foundations/Intro to Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 2010</td>
<td>Intro to Exceptional Learners</td>
</tr>
<tr>
<td>EDUC 2400</td>
<td>Foundations Multicultural/ESL</td>
</tr>
<tr>
<td>EDUC 2500</td>
<td>Instructional Technology in K-12 Classrooms</td>
</tr>
<tr>
<td>EDUC 3110</td>
<td>Educational Psychology</td>
</tr>
</tbody>
</table>

Bachelor of Arts: Foreign Language Requirement

Complete one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bachelor of Arts: Foreign Language Requirement</td>
<td>3-16</td>
</tr>
</tbody>
</table>
- Complete 16 credits in a single foreign language, through earned credit (grade C or higher), credit by examination, or vertical credit from the courses listed on the GE Foreign Language Requirement page

- Complete a 2020 or higher foreign language course (grade C or higher)

- Complete a 3060 foreign language course listed below (grade C or higher)

- Receive 16 transfer credits for GEFL 1000 (8) and GEFL 2000 (8) in a single foreign language (grade C or higher)

**OR**

**Complete a 1020 course listed below in a second foreign language (grade C or higher) AND one of the following:**

1. In a language not taught at DSU, receive 12 FLATS exam credits for FLAT 1000 (8) and FLAT 2000 (4)

or

2. In a language not taught at DSU, receive 12 transfer credits articulated as GEFL 1000 (8) and GEFL 2000 (4) (all grade C or higher)

**OR**

Available only to students who are nonnative English speakers, complete one of the following:

- Complete 16 credits of ESL courses listed below (grade B or higher)

- Complete ESL 2750 (catalog.dixie.edu/search/?P=ESL%202750) or ESL 2760 (catalog.dixie.edu/search/?P=ESL%202760) (grade B or higher).

- Submit one of the following test scores required for unconditional DSU admission: TOEFL (61 iBT, 173 CBT, or 500 PBT); or Michigan (70); or USU-IELE equivalent score. Other tests may be accepted for admission to DSU but will not fulfill this requirement. Official scores must be submitted to the Registrar’s Office.

Total Hours 3-16

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1 General Education Foreign Language Classes may be found on the General Education page (catalog.dixie.edu/programs/generaleducation/foreignlanguagerequirementtext).

### Core Discipline Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1040</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1210</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1220</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2200</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2210</td>
<td>Multivariable Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2270</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2280</td>
<td>Ordinary Differential Equation</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3000</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3100</td>
<td>Euclidean / Non-Euclidean Geom</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3200</td>
<td>Introduction to Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3400</td>
<td>Probability &amp; Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3900</td>
<td>Number Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4000</td>
<td>Foundations of Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

### Mathematics Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 1400</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2210</td>
<td>Physics/Scientists Engineers I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHYS 2215</td>
<td>and Physics/Scientists Engineers Lab</td>
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</table>

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**Secondary Education Program Admission**

To be admitted to the Secondary Education Program and enroll in professional courses:

- USOE R277-504-3 A(3) “requires candidates to maintain a cumulative university GPA of 3.0, and receive a C or better in all education related courses and major required content courses”

and students must pass the appropriate PRAXIS II content area subject test(s). In addition, one of the following must be completed:

- Students with BA/BS degrees in progress must have completed at least 95% of major coursework and have approval of major academic content area department advisor
- Students with completed BA/BS or higher degrees must have their transcripts reviewed by content area department advisor

### Secondary Education Program Professional Requirements

#### Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCED 3720</td>
<td>Reading Writing Content Areas</td>
<td>3</td>
</tr>
</tbody>
</table>
SCED 4100  Curriculum, Instruction, and Assessment  3
SCED 4600  Classroom Management  3
MATH 4500  Methods Teach Secondary Math  3

Semester II
SCED 4900  Secondary Student Teaching  10
SCED 4989  Student Teaching Seminar  2

Graduation Requirements
1. Complete a minimum of 120 college-level credits (1000 and above).
2. Complete at least 40 upper-division credits (3000 and above).
3. Complete at least 30 upper-division credits at DSU for institutional residency.
4. Cumulative university GPA 3.0 or higher.
5. Grade C or higher required (not C-) in each Mathematics Core Requirement and Program requirement course.
6. USOE R277-504-3 A(3) “requires candidates to maintain a cumulative university GPA of 3.0, and receive a C or better in all education related courses and major required content courses”
7. 3.0 GPA or higher in Education and Secondary Education program prerequisite and professional courses.

Graduation Plan

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>1st Year</td>
<td></td>
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</tr>
<tr>
<td>Fall Semester</td>
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<tr>
<td>MATH 1210</td>
<td>Calculus I</td>
<td>4</td>
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<tr>
<td>MATH 1001</td>
<td>FYE: Mathematics</td>
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<tr>
<td>CIS 1200</td>
<td>Computer Literacy</td>
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<tr>
<td>General Education (Fine Arts) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)</td>
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<tr>
<td>General Education (American Institutions) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)</td>
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<tr>
<td>General Elective</td>
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<tr>
<td>Hours</td>
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<tr>
<td>Spring Semester</td>
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<tr>
<td>MATH 1220</td>
<td>Calculus II</td>
<td>4</td>
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<td>MATH 2200</td>
<td>Discrete Mathematics</td>
<td>3</td>
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<tr>
<td>LIB 1010</td>
<td>Information Literacy</td>
<td>1</td>
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<tr>
<td>ENGL 1010</td>
<td>Introduction to Writing</td>
<td>3</td>
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<tr>
<td>General Education (Life Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)</td>
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<tr>
<td>General Education (Social and Behavioral Sciences) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)</td>
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<td>Hours</td>
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<td>MATH 2270</td>
<td>Linear Algebra</td>
<td>3</td>
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<tr>
<td>MATH 3000</td>
<td>History of Mathematics</td>
<td>3</td>
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<tr>
<td>ENGL 2010</td>
<td>Intern Writing Selected Topics:</td>
<td>3</td>
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<tr>
<td>PHYS 2210 &amp; PHYS 2215</td>
<td>Physics/Scientists Engineers I and Physics/Scientists Engineers Lab</td>
<td>5</td>
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<tr>
<td>Hours</td>
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<tr>
<td>Spring Semester</td>
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<td>MATH 2210</td>
<td>Multivariable Calculus</td>
<td>4</td>
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<tr>
<td>MATH 2280</td>
<td>Ordinary Differential Equation</td>
<td>3</td>
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<tr>
<td>MATH 3900</td>
<td>Number Theory</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 1010</td>
<td>Foundations/Intro to Education</td>
<td>3</td>
</tr>
<tr>
<td>General Education (Literature/Humanities/GLOCUP) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)</td>
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<td>General Elective</td>
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<td>Hours</td>
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### 3rd Year
#### Fall Semester
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MATH 1040</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4000</td>
<td>Foundations of Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CS 1400</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2010</td>
<td>Intro to Exceptional Learners</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2400</td>
<td>Foundations Multicultural/ESL (GLOCUP)</td>
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| Hours       | 15 |

#### Spring Semester
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MATH 3100</td>
<td>Euclidean / Non-Euclidean Geom</td>
<td>3</td>
</tr>
<tr>
<td>MATH 3400</td>
<td>Probability &amp; Statistics</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 2500</td>
<td>Instructional Technology in K-12 Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 3110</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>General Education (Exploration) (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)</td>
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| Hours       | 15 |

### 4th Year
#### Fall Semester
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MATH 3200</td>
<td>Introduction to Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4500</td>
<td>Methods Teach Secondary Math</td>
<td>3</td>
</tr>
<tr>
<td>SCED 3720</td>
<td>Reading Writing Content Areas</td>
<td>3</td>
</tr>
<tr>
<td>SCED 4100</td>
<td>Curriculum, Instruction, and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SCED 4600</td>
<td>Classroom Management</td>
<td>3</td>
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</table>

| Hours       | 15 |

#### Spring Semester
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SCED 4900</td>
<td>Secondary Student Teaching</td>
<td>10</td>
</tr>
<tr>
<td>SCED 4989</td>
<td>Student Teaching Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

| Hours       | 12 |

| Total Hours | 120 |