

# 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.

Code	Title	Hours
<b>Institutional Requirement in Computer Literacy</b> (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		
	Computer Literacy	0-6
<b>General Education Core Requirements</b> (catalog.dixie.edu/programs/generaleducation/#gerequirementstext)		
	English	3-7
	Information Literacy	0-1
	Mathematics	3-5
	American Institutions	3-6
	Life Sciences	3-10
	Physical Sciences	3-5
	Laboratory Science	0-1
	Fine Arts	3
	Literature/Humanities	3
	Social & Behavioral Sciences	3
	Exploration	3-5
	Two (2) Global & Cultural Perspectives Courses	0-6
<b>Secondary Education Program Requirements</b>		
Complete one of the following through General Education or elective credit:		
HIST 1700	American Civilization	3
or POLS 1100	American Government	
Complete one of the following through General Education or elective credit:		
FSHD 1500	Human Development Lifespan	3
or PSY 1010	General Psychology	
or PSY 1100	Human Development Through Lifespan	
Complete the following program prerequisite courses:		
EDUC 1010	Foundations/Intro to Education	3
EDUC 2010	Intro to Exceptional Learners	3
EDUC 2400	Foundations Multicultural/ESL	3
EDUC 2500	Instructional Technology in K-12 Classrooms	3
EDUC 3110	Educational Psychology	3
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Bachelor of Arts: Foreign Language Requirement</b>		3-16
<b>Complete one of the following:</b>		

- 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 <sup>1</sup>

- 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

<sup>1</sup> General Education Foreign Language Classes may be found on the General Education page (catalog.dixie.edu/programs/generaleducation/#foreignlanguage requirementtext).

#### Core Discipline Requirements

MATH 1040	Introduction to Statistics	3
MATH 1210	Calculus I	4
MATH 1220	Calculus II	4
MATH 2200	Discrete Mathematics	3
MATH 2210	Multivariable Calculus	4
MATH 2270	Linear Algebra	3
MATH 2280	Ordinary Differential Equation	3
MATH 3000	History of Mathematics	3
MATH 3100	Euclidean / Non-Euclidean Geom	3
MATH 3200	Introduction to Analysis I	3
MATH 3400	Probability & Statistics	3
MATH 3900	Number Theory	3
MATH 4000	Foundations of Algebra	3

#### Mathematics Program Requirements

CS 1400	Fundamentals of Programming	3
PHYS 2210 & PHYS 2215	Physics/Scientists Engineers I and Physics/Scientists Engineers Lab	5

## 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

SCED 3720	Reading Writing Content Areas	3
-----------	-------------------------------	---

SCED 4100	Curriculum, Instruction, and Assessment	3
SCED 4600	Classroom Management	3
MATH 4500	Methods Teach Secondary Math	3
<b>Semester II</b>		
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

Course	Title	Hours
<b>1st Year</b>		
<b>Fall Semester</b>		
MATH 1210	Calculus I	4
MATH 1001	FYE: Mathematics	1
CIS 1200	Computer Literacy	3
General Education (Fine Arts) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		3
General Education (American Institutions) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> ) <sup>1</sup>		3
General Elective		1
Hours		15
<b>Spring Semester</b>		
MATH 1220	Calculus II	4
MATH 2200	Discrete Mathematics	3
LIB 1010	Information Literacy	1
ENGL 1010	Introduction to Writing	3
General Education (Life Sciences) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		3
General Education (Social and Behavioral Sciences) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> ) <sup>1</sup>		3
Hours		17
<b>2nd Year</b>		
<b>Fall Semester</b>		
MATH 2270	Linear Algebra	3
MATH 3000	History of Mathematics	3
ENGL 2010	Intern Writing Selected Topics:	3
PHYS 2210 & PHYS 2215	Physics/Scientists Engineers I and Physics/Scientists Engineers Lab	5
Hours		14
<b>Spring Semester</b>		
MATH 2210	Multivariable Calculus	4
MATH 2280	Ordinary Differential Equation	3
MATH 3900	Number Theory	3
EDUC 1010	Foundations/Intro to Education	3
General Education (Literature/Humanities/GLOCUP) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		3
General Elective		1
Hours		17

**3rd Year****Fall Semester**

MATH 1040	Introduction to Statistics	3
MATH 4000	Foundations of Algebra	3
CS 1400	Fundamentals of Programming	3
EDUC 2010	Intro to Exceptional Learners	3
EDUC 2400	Foundations Multicultural/ESL (GLOCUP)	3
Hours		15

**Spring Semester**

MATH 3100	Euclidean / Non-Euclidean Geom	3
MATH 3400	Probability & Statistics	3
EDUC 2500	Instructional Technology in K-12 Classrooms	3
EDUC 3110	Educational Psychology	3
General Education (Exploration) ( <a href="http://catalog.dixie.edu/programs/generaleducation/#gerequirementstext">catalog.dixie.edu/programs/generaleducation/#gerequirementstext</a> )		3
Hours		15

**4th Year****Fall Semester**

MATH 3200	Introduction to Analysis I	3
MATH 4500	Methods Teach Secondary Math	3
SCED 3720	Reading Writing Content Areas	3
SCED 4100	Curriculum, Instruction, and Assessment	3
SCED 4600	Classroom Management	3
Hours		15

**Spring Semester**

SCED 4900	Secondary Student Teaching	10
SCED 4989	Student Teaching Seminar	2
Hours		12
Total Hours		120