

# Mathematics Education

## Department Information

- **Department Web Site:**  
www.ndsu.edu/education/ (<http://www.ndsu.edu/education/>)
- **Credential Offered:**  
B.S.; B.A.
- **Sample Program Guide:**  
[catalog.ndsu.edu/programs-study/undergraduate/mathematics-education/#planofstudytext](http://catalog.ndsu.edu/programs-study/undergraduate/mathematics-education/#planofstudytext) (<http://catalog.ndsu.edu/programs-study/undergraduate/mathematics-education/#planofstudytext>)

## Major Requirements

### Major: Mathematics Education

**Degree Type:** B.A. or B.S.

**Minimum Degree Credits to Graduate:** 120

### University Degree Requirements

1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
3. Satisfactory completion of the general education requirements as specified by the university.
4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
5. At least 30 credits must be NDSU resident credits. Resident credits include credits registered and paid for at NDSU.
6. At least 36 credits presented for graduation must be in courses numbered 300 or higher.
7. Students presenting transfer credit must meet the NDSU residence credits and the minimum upper level credit. Of the 30 credits earned in residence, a minimum of 15 semester credits must be in courses numbered 300 or above, and 15 semester credits must be in the student's curricula for their declared major.

For complete information, please refer to the Degree and Graduation Requirements (<http://catalog.ndsu.edu/academic-policies/undergraduate-policies/degree-and-graduation/>) section of this Bulletin.

### University General Education Requirements

A list of university approved general education courses and administrative policies are available here (<http://catalog.ndsu.edu/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).

Code	Title	Credits
<b>Category C: Communication</b>		<b>12</b>
ENGL 110	College Composition I	
ENGL 120	College Composition II	
COMM 110	Fundamentals of Public Speaking	
Upper Division Writing <sup>†</sup>		
<b>Category R: Quantitative Reasoning <sup>†</sup></b>		<b>3</b>
<b>Category S: Science and Technology <sup>†</sup></b>		<b>10</b>
<b>Category A: Humanities and Fine Arts <sup>†</sup></b>		<b>6</b>
<b>Category B: Social and Behavioral Sciences <sup>†</sup></b>		<b>6</b>
<b>Category W: Wellness <sup>†</sup></b>		<b>2</b>
<b>Category D: Cultural Diversity <sup>*†</sup></b>		
<b>Category G: Global Perspectives <sup>*†</sup></b>		
<b>Total Credits</b>		<b>39</b>

\*

Courses for category D & G are satisfied by completing D & G designated courses in another general education category.

†

General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.

## Major Requirements

Code	Title	Credits
<b>Teaching Specialty Requirements</b>		
CSCI 160	Computer Science I	4
MATH 165	Calculus I	4
MATH 166	Calculus II	4
MATH 265	Calculus III	4
MATH 270	Introduction to Abstract Mathematics	3
MATH 329	Intermediate Linear Algebra	3
MATH 346	Metric Space Topology	3
MATH 374	Special Problems In Mathematics	1
MATH 420	Abstract Algebra I	3
MATH 440	Axiomatic Geometry	3
MATH 450	Real Analysis I	3
MATH 478	History of Mathematics	3
STAT 367	Probability	3
STAT 368	Statistics	3
<b>Mathematics Courses</b>		
Select one 300-400 level MATH prefix course approved by the department. MATH 266 may be used as one of these electives.		3
<b>Professional Education Requirements</b>		
EDUC 321	Introduction to Teaching	3
EDUC 322	Educational Psychology	3
EDUC 451	Instructional Planning, Methods and Assessment	3
EDUC 481	Classroom Practice Methods of Teaching I: (Math)	3
EDUC 485	Student Teaching Seminar	1
EDUC 486	Classroom Management for Diverse Learners	3
EDUC 487	Student Teaching	9
EDUC 488	Applied Student Teaching	3
EDUC 489	Teaching Students of Diverse Backgrounds	3
<b>Total Credits</b>		<b>78</b>

## Degree Requirements and Notes

- To be placed in student teaching, a 2.75 cumulative GPA and a 2.75 GPA in professional education coursework is required.
- A grade of 'C' or better is required in all Teaching Specialty requirement courses and the Professional Education requirement courses.
- To exit the program, a 2.75 cumulative GPA and a 2.75 GPA in professional education coursework is required as well as completing the Praxis Subject test and the Principles of Learning and Teaching test.
- Courses taken *Pass/Fail* will not be used to satisfy any requirements other than total credits.
- Students pursuing both Mathematics Education and Mathematics majors are encouraged to take STAT 467/468 in place of STAT 367/368, and choose MATH 421 and 453 or 454 as part of their required Math credits.
- See School of Education (<https://www.ndsu.edu/education/>) for admission requirements.