

Mathematics Education

Department Information

- **Department Location:**
Katherine Kilbourne Burgum Family Life, 4-H Center
- **Department Phone:**
701-231-7921
- **Department Web Site:**
www.ndsu.edu/education/
- **Credential Offered:**
B.S.; B.A.
- **Plan Of Study Sample:**
bulletin.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 36 credits presented for graduation must be in courses number 300 or higher.
6. Transfer Students: Must earn a minimum of 60 credits from a baccalaureate-degree granting or professional institution.
 - a. Of these 60, at least 36 must be NDSU residence credits as defined in #7.
 - b. Within the 36 resident credits, a minimum of 15 must be in courses numbered 300 or higher and 15 credits in the major field of study.
7. At least 36 credits must be NDSU resident credits. Residence credits include credits registered and paid for at NDSU.

For complete information, please refer to the Degree and Graduation Requirements (<http://bulletin.ndsu.edu/past-bulletin-archive/2019-20/academic-policies/undergraduate-policies/degree-and-graduation>) section of this Bulletin.

University General Education Requirements

| Code | Title | Credits |
|--|---------------------------------|---------|
| Communication (C) | | 12 |
| ENGL 110 | College Composition I | |
| ENGL 120 | College Composition II | |
| COMM 110 | Fundamentals of Public Speaking | |
| Upper Division Writing [†] | | |
| Quantitative Reasoning (R) [†] | | 3 |
| Science and Technology (S) [†] | | 10 |
| Humanities and Fine Arts (A) [†] | | 6 |
| Social and Behavioral Sciences (B) [†] | | 6 |
| Wellness (W) [†] | | 2 |
| Cultural Diversity (D) ^{*†} | | |
| Global Perspectives (G) ^{*†} | | |
| Total Credits | | 39 |

* May be satisfied by completing 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.

- A list of university approved general education courses and administrative policies are available here (<http://bulletin.ndsu.edu/past-bulletin-archive/2019-20/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).

Major Requirements

A grade of 'C' or better is required in all Teaching Specialty requirement courses and the Professional Education requirement courses.

| Code | Title | Credits |
|---|---|---------|
| Teaching Specialty Requirements | | |
| CSCI 160 | Computer Science I | 4 |
| MATH 165 | Calculus I (May satisfy general education category R) | 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 |
| Mathematics Courses | | |
| Select one 300-400 level MATH prefix course approved by the department. MATH 266 may be used as one of these electives. | | 3 |
| Professional Education Requirements | | |
| 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 |
| Total Credits | | 78 |

Degree Requirements and Notes

- A GPA of 2.75 or better in the teaching specialty is required for placement in student teaching and exit from the program.
- A GPA of 2.75 or better in professional education as well as passing the appropriate Praxis II exam are required to exit the program.
- 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.