

# Mathematics Major

## Major Requirements

Degree Type: B.A. or B.S.  
Minimum Credits Required: 120

### University Degree Requirements

For complete details on these and other university degree requirements, refer to the Degree and Graduation Requirements (<http://catalog.ndsu.edu/academic-policies/undergraduate-policies/degree-and-graduation/>) section in the University Catalog.

1. Minimum of 120 semester credits (some programs may exceed this minimum).
2. Complete the University General Education requirements.
3. Minimum institutional GPA of 2.00 based on work taken at NDSU.
4. Minimum of 30 credits in resident at NDSU.
5. Minimum of 36 upper level credits (courses numbered 300 or higher).
6. Students with transfer credit must meet the NDSU 30 credits in residence (#4). Of these 30 credits in residence, a minimum of 15 credits must be in courses numbered 300 or above, and 15 credits must be in the student's declared major curricula.

### University General Education Requirements

A list of university approved general education courses along with the administrative policies governing the requirement and the categories is available here (<http://catalog.ndsu.edu/academic-policies/undergraduate-policies/general-education/>).

Code	Title	Credits
Category C: Communication		12
Category R: Quantitative Reasoning		3
Category S: Science and Technology		10
Category A: Humanities and Fine Arts		6
Category B: Social and Behavioral Sciences		6
Category W: Wellness		2
Category D: Cultural Diversity		
Category G: Global Perspectives		
Category L: Digital Literacy		
Total Credits		39

### major requirements

Code	Title	Credits
<b>Required Mathematics Courses</b>		
MATH 129	Basic Linear Algebra	3
MATH 165	Calculus I	4
MATH 166	Calculus II	4
MATH 265	Calculus III	4
MATH 266	Introduction to Differential Equations	3
MATH 270	Introduction to Abstract Mathematics	3
MATH 329	Intermediate Linear Algebra	3
MATH 346	Metric Space Topology	3
MATH 420	Abstract Algebra I <sup>1</sup>	3
or MATH 620	Abstract Algebra I	
MATH 450	Real Analysis I <sup>1</sup>	3
or MATH 650	Real Analysis I	
MATH 452	Complex Analysis <sup>1</sup>	3
or MATH 652	Complex Analysis	
MATH 483	Partial Differential Equations <sup>1</sup>	3
or MATH 683	Partial Differential Equations	

MATH 491	Seminar	2
<b>Mathematics Electives <sup>1</sup></b>		
MATH prefix courses numbered 300 or higher, not including those listed above. Students who also major in Math Education may use EDUC 487 (student teaching) towards this requirement. Students approved for the accelerated program should refer to the footnote.		16
<b>Related Required Courses</b>		
A minor or second major in any other program or 15 credits of coursework that includes at least two 300-level (or higher) courses in another discipline.		15
<b>Total Credits</b>		<b>72</b>

<sup>1</sup> Accelerated Program: Students approved for the accelerated program may complete MATH prefix courses numbered 600-689 toward this math elective section of the major. No more than 15 graduate credits will be applied to the undergraduate math degree.

## Program Notes

- Except for courses offered only as pass/fail grading, no course may be taken Pass/Fail.
- A grade of 'C' or better is required in all MATH prefix courses.