## Mathematics and Statistics

## Department Information

- Department Web Site: www.ndsu.edu/math/ (http://www.ndsu.edu/math/)
- Credential Offered: B.S.; B.A.
- Sample Program Guide:
catalog.ndsu.edu/programs-study/undergraduate/mathematics-statistics/ (http://catalog.ndsu.edu/programs-study/undergraduate/ mathematics-statistics/)


## Major Requirements

## Major: Mathematics \& Statistics

## 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/past-bulletin-archive/2023-24/academic-policies/undergraduate-policies/degree-and-graduation/) section of this Bulletin.

| 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 ${ }^{\dagger}$ |  |  |
| Quantitative Reasoning (R) ${ }^{\text {T}}$ |  | 3 |
| Science and Technology (S) ${ }^{\dagger}$ |  | 10 |
| Humanities and Fine Arts (A) ${ }^{\dagger}$ |  | 6 |
| Social and Behavioral Sciences (B) ${ }^{\dagger}$ |  | 6 |
| Wellness (W) ${ }^{\text {+ }}$ |  | 2 |
| Cultural Diversity (D) ${ }^{*+}$ |  |  |
| Global Perspectives (G) ${ }^{\text {* }}$ |  |  |
| Total Credits |  | 39 |
| * |  |  |
| May be satisfied by completing courses in another General Education category. |  |  |
| t |  |  |
| 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://catalog.ndsu.edu/past-bulletin-archive/2023-24/academic-policies/undergraduate-policies/general-education/\#genedcoursestext).


## College Requirements

| Code | Title | Credit |
| :---: | :---: | :---: |
| Bachelor of Arts (BA) Degree - An additional 12 credits Humanities and Social Sciences and proficiency at the second year level in a modern foreign language. |  |  |
| Bachelor of Science (BS) Degree - An additional 6 credits in Humanities or Social Sciences * |  |  |
| * |  |  |
| Humanities and Social Sciences may be fulfilled by any course having the following prefix: ADHM, ANTH, ARCH, ART, CJ, CLAS, COMM, ECON, ENGL, FREN, GEOG, GERM, HDFS, HIST, LA, LANG, MUSC, PHIL, POLS, PSYC, RELS, SOC, SPAN, THEA, WGS, or any course from the approved list of general education courses in humanities and social sciences (general education categories A and B). These credits must come from outside the department of the student's major. |  |  |

## Mathematics \& Statistics Major Requirements

A grade of 'C' or better is required in all MATH and STAT prefix courses.

| Code | Title | Credits |
| :---: | :---: | :---: |
| Math Major Core Requirements |  |  |
| MATH 129 | Basic Linear Algebra | 3 |
| MATH 165 | Calculus I (May satisfy general education category R) | 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 450 | Real Analysis I | 3 |
| MATH 491 | Seminar | 2 |
| Mathematics Electives | Any 300-400 level | 3 |
| Statistics Major Requirements |  |  |
| STAT 330 | Introductory Statistics | 3 |
| STAT 461 | Applied Regression Models | 3 |
| STAT 462 | Introduction to Experimental Design (Capstone) | 3 |
| STAT 467 | Probability and Mathematical Statistics I | 3 |
| STAT 468 | Probability and Mathematical Statistics II | 3 |
| Statistics Electives | 400 level other than those listed above | 18 |
| Related Required Courses: |  |  |
| CSCI 160 | Computer Science I | 4 |
| CSCI 161 | Computer Science II | 4 |
| Total Credits |  | 76 |

