

# Statistics

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## Department Information

- **Department Location:**  
Morrill Hall
- **Department Phone:**  
701-231-7532
- **Department Email:**  
ndsu.stats@ndsu.edu
- **Department Web Site:**  
[www.ndsu.edu/academics/programs/](http://www.ndsu.edu/academics/programs/) (<http://www.ndsu.edu/academics/programs/>)
- **Credential Offered:**  
B.S.; B.A.
- **Plan Of Study Sample:**  
[catalog.ndsu.edu/programs-study/undergraduate/statistics/](http://catalog.ndsu.edu/programs-study/undergraduate/statistics/) (<http://catalog.ndsu.edu/programs-study/undergraduate/statistics/>)

## Major Requirements

### Major: 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 36 credits presented for graduation must be in courses numbered 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 resident 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. Resident credits include credits registered and paid for at NDSU.

For complete information, please refer to the Degree and Graduation Requirements (<http://catalog.ndsu.edu/past-bulletin-archive/2021-22/academic-policies/undergraduate-policies/degree-and-graduation/>) section of this Bulletin.

### University General Education Requirements

Code	Title	Credits
<b>Communication (C)</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>Quantitative Reasoning (R) <sup>†</sup></b>		<b>3</b>
<b>Science and Technology (S) <sup>†</sup></b>		<b>10</b>
<b>Humanities and Fine Arts (A) <sup>†</sup></b>		<b>6</b>
<b>Social and Behavioral Sciences (B) <sup>†</sup></b>		<b>6</b>
<b>Wellness (W) <sup>†</sup></b>		<b>2</b>
<b>Cultural Diversity (D) <sup>**†</sup></b>		
<b>Global Perspectives (G) <sup>**†</sup></b>		
<b>Total Credits</b>		<b>39</b>

- \* 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://catalog.ndsu.edu/past-bulletin-archive/2021-22/academic-policies/undergraduate-policies/general-education/#genedcoursestext>).

## College Requirements

Code	Title	Credits
<b>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.*</b>		<b>12</b>
<b>Bachelor of Science (BS) Degree – An additional 6 credits in Humanities or Social Sciences*</b>		<b>6</b>

- \* 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.

## Major Requirements

A grade of 'C' or better is required in ALL courses used toward the major.

Code	Title	Credits
<b>Statistics Major Requirements</b>		
CSCI 160	Computer Science I	4
CSCI 222	Discrete Mathematics	3
or MATH 270	Introduction to Abstract Mathematics	
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
STAT 367	Probability	3
STAT 368	Statistics	3
STAT 461	Applied Regression Models	3
STAT 462	Introduction to Experimental Design (Capstone)	3
<b>Electives: Select 15 credits from the following (can choose only one CSCI course):</b>		<b>15</b>
CSCI 161	Computer Science II	
CSCI 418	Simulation Models	
MATH 329	Intermediate Linear Algebra	
STAT 460	Applied Survey Sampling	
STAT 463	Nonparametric Statistics	
STAT 464	Discrete Data Analysis	
STAT 467	Probability and Mathematical Statistics I	
STAT 468	Probability and Mathematical Statistics II	
STAT 469	Introduction to Biostatistics	
STAT 470	Statistical SAS Programming	
STAT 471	Introduction to the R Language	
STAT 472	Time Series	
<b>Minor Requirement</b>		<b>16</b>
A minor is required in one of the following disciplines: Social Science, Physical Science, Biological Science, Business, Mathematics, or Computer Science.		
<b>Total Credits</b>		<b>65</b>

## Program Notes

- Except for courses offered only as pass/fail grading, no course may be taken Pass/Fail.

## Minor Requirements

### Minor: Statistics

#### Standard Track

Required Credits: 22

Code	Title	Credits
<b>Required Courses</b>		
MATH 165	Calculus I	4
MATH 166	Calculus II	4
STAT 331	Regression Analysis	2
or STAT 461	Applied Regression Models	
STAT 367	Probability	3
STAT 368	Statistics	3
STAT 462	Introduction to Experimental Design	3
STAT Elective	400 Level	3
<b>Total Credits</b>		<b>22</b>

#### Applied Statistics Track

Required Credits: 17

Code	Title	Credits
<b>Required Courses</b>		
STAT 330	Introductory Statistics	3
STAT 331	Regression Analysis	2
STAT Electives	Select 4 department approved 400-level, 3 credit statistics courses.	12
<b>Total Credits</b>		<b>17</b>

### Minor Requirements and Notes

- A minimum of 8 credits must be taken at NDSU.