

Data Science

Department Information

- **Department Web Site:**
<https://www.ndsu.edu/cs/>
- **Credential Offered:**
B.S.; UG Certificate
- **Official Program Curriculum:**
catalog.ndsu.edu/undergraduate/program-curriculum/data-science/ (<http://catalog.ndsu.edu/undergraduate/program-curriculum/data-science/>)

The Major

The data science degree program is designed to equip students with advanced skills for success in today's data-driven world. This strategic program seamlessly blends statistics, computer science, and business, providing a deep understanding of data analysis, predictive modeling, and machine learning techniques while establishing a robust foundation in statistical methodologies and computational proficiency.

Students will learn how to navigate data collection, interpretation, and cleaning intricacies, simultaneously mastering programming languages and tools crucial for efficient data manipulation and analysis. Through a specialized focus on statistics, students gain expertise to extract valuable insights from complex datasets, making informed data-driven decisions, and expertly communicate findings to diverse audiences.

The Certificate

The Data Science certificate draws from the set of courses that are specific to the Data Science track of the B.S. in Computer Science degree. It can be of interest to professionals with computer science degrees who wish to expand their expertise in the area of data science. It is also targeted at current students who complete a different Computer Science track or another major program and wish to cover more than one specialization.

Freshman			
Fall	Credits	Spring	Credits
ENGL 110		3 ENGL 120	3
COMM 110		3 TL 116, CSCI 114, or CSCI 159	3
MATH 165		4 MATH 166	4
CSCI 227		3 CSCI 228	3
Gen Ed Humanities/FA & Cult Div		3 Gen Ed Wellness	2
		16	15
Sophomore			
Fall	Credits	Spring	Credits
STAT 367		3 STAT 368	3
BUSN 380		3 MIS 479	3
MIS 340		3 CSCI 161	4
CSCI 222		3 Gen Ed Humanities/FA	3
Gen Ed Soc/Beh Sci & Glob Persp		3 Elective	3
		15	16
Junior			
Fall	Credits	Spring	Credits
CSCI 312		3 STAT 412	3
ENGL 321 or 324		3 Track Course	3
Track Course		3 Gen Ed Soc/Beh Science	3
Gen Ed Science & Lab		4 Elective	3
		Elective	3
		13	15

Senior			
Fall	Credits	Spring	Credits
CSCI 366		3 Track Course	3
PHIL 215, CSCI 489, or ENGR 327		3 Gen Ed Science/Tech	3
Track Course		3 Elective	3
Elective		3 Elective	3
Elective		3 Elective	3
		15	15
Total Credits: 120			