Nebraska Wesleyan University

Data Analytics (B.A., B.S.)

Catalog

2024-2025

Program Description

The Data Analytics major brings together skills in computer programming, quantitative reasoning, collaboration, communication, and creative thinking. Students who pursue this major will develop a broad technological toolkit for obtaining, analyzing, and visualizing data. By applying their skills to projects and internships, students will acquire flexible problem-solving skills for rapidly-changing professional environment.

Academically equivalent, both bachelor of arts and bachelor of science degrees will fully prepare you for a career in data analytics. If you choose to graduate with two majors, and the one major is only offered as a B.A. or B.S., the second major should match the first degree.

Departments

1. Mathematics and Computer Science

Data Analytics Major (B.A. or B.S.**, 38-40 hours)

Technical Foundations	20 hours
CMPSC 1100 Python Programming I	4 hours
DATA 1200 Excel and SQL Programming	4 hours
CMPSC 2100 Python Programming II	4 hours
DATA 1350 Introduction To Data Analytics	4 hours
DATA 3100 Data Visualization With R	4 hours
Statistics	**2-4 hours**
Take one of the following: • BUSAD 2100 Business and Economic Statistics • MATH 1300 Statistics • MATH 3300 Mathematical Statistics I • POLSC 2000 Introduction to Political Science Statistics • PSYCH 2100 Psychological Statistics • SOC 2910 Social Statistics	2-4 hours
Communication	**4 hours**
Take one of the following: • COMM 4100 Communication in the Professions • COMM 3200 Persuasive Communication • COMM 3800 Communication through Dialogue	4 hours
Concentration (Choose one)	**6 hours**

Advanced Data Analytics	3 hours
• DATA 3200 Principles and Techniques of Data Analytics I*	3 hours
• DATA 3300 Principles and Techniques of Data Analytics II*	
Business	3 hours
• BUSAD 3100 Managing Information Systems	3 hours
• BUSAD 3300 Quantitative Methods	
Project Management	3 hours
• BUSAD 1650 Introduction to Project Management*	3 hours
• BUSAD 2550 Project Planning*	
Cybersecurity	3 hours
• DATA 1700 Introduction to Cybersecurity*	3 hours
• DATA 2700 Cybercrime and Governance*	
Supply Chain Management	3 hours
• DATA 2200 Forecasting And Logistics*	3 hours
• DATA 2300 Sourcing and Operations*	
Computer Science	3 hours
• CMPSC 3000 Data Structures*	3 hours
• CMPSC 4000 Algorithms*	
Experiential Learning Internship	**6 hours**
DATA 4970 Internship	3 hours
Capstone	**3 hours**
DATA 4980 Capstone Project	3 hours

*This course is offered remotely via NWU's partnership with a Consortium. The partnership allows students to earn NWU credit for specific courses. Classes are designed by top academics and industry leaders, vetted by NWU, and taught by experts in the field.

***A Data Analytics major may earn either a B.A. or B.S. degree. However, if a student has a first major that is associated with a different baccalaureate degree, the Data Analytics major may serve as a second major for the degree associated with the first major (B.FA., B.M., B.S.N.).*