

Major:

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

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/Programs:

Mathematics and Computer Science

Data Analytics Major (B.A. or B.S.** , 40-42 hours)

Technical Foundations	22 hours
CMPSC 1100 Python Programming I	4 hours
DATA 1200 Excel and SQL Programming	4 hours
CMPSC 2100 Python Programming II	4 hours
DATA 1300 Foundations of Data Analytics I*	3 hours
DATA 1400 Foundations of Data Analytics II*	3 hours
DATA 3100 Data Visualization With R	4 hours
Statistics	2-4 hours
Take one of the following:	
<ul style="list-style-type: none">BUSAD 2100 Business and Economic StatisticsMATH 1300 StatisticsMATH 3300 Mathematical Statistics IPOLSC 2000 Introduction to Political Science StatisticsPSYCH 2100 Psychological StatisticsSOC 2910 Social Statistics	2-4 hours
Communication	4 hours

Take one of the following:

- COMM 4100 Communication in the Professions 4 hours
- COMM 3200 Persuasive Communication
- COMM 3800 Communication through Dialogue

Concentration (Choose one)	6 hours
Advanced Data Analytics	3 hours
<ul style="list-style-type: none"> • DATA 3200 Principles and Techniques of Data Analytics I* • DATA 3300 Principles and Techniques of Data Analytics II* 	3 hours
Business	3 hours
<ul style="list-style-type: none"> • BUSAD 3100 Managing Information Systems • BUSAD 3300 Quantitative Methods 	3 hours
Project Management	3 hours
<ul style="list-style-type: none"> • BUSAD 1650 Introduction to Project Management* • BUSAD 2550 Project Planning* 	3 hours
Cybersecurity	3 hours
<ul style="list-style-type: none"> • DATA 1700 Introduction to Cybersecurity* • DATA 2700 Cybercrime and Governance* 	3 hours
Supply Chain Management	3 hours
<ul style="list-style-type: none"> • DATA 2200 Forecasting And Logistics* • DATA 2300 Sourcing and Operations* 	3 hours
Computer Science	3 hours
<ul style="list-style-type: none"> • CMPSC 3000 Data Structures* • CMPSC 4000 Algorithms* 	3 hours
Experiential Learning Capstone	6 hours
DATA 4970 Internship	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.F.A., B.M., B.S.N.).