

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:

- 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
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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
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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\*

Concentration (Choose one)		6 hours
Business		3 hours
	<ul style="list-style-type: none"> <li>BUSAD 3100 Managing Information Systems</li> <li>BUSAD 3300 Quantitative Methods</li> </ul>	3 hours
Project Management		3 hours
	<ul style="list-style-type: none"> <li>BUSAD 1650 Introduction to Project Management*</li> <li>BUSAD 2550 Project Planning*</li> </ul>	3 hours
Cybersecurity		3 hours
	<ul style="list-style-type: none"> <li>DATA 1700 Introduction to Cybersecurity*</li> <li>DATA 2700 Cybercrime and Governance*</li> </ul>	3 hours
Supply Chain Management		3 hours
	<ul style="list-style-type: none"> <li>DATA 2200 Forecasting And Logistics*</li> <li>DATA 2300 Sourcing and Operations*</li> </ul>	3 hours
Computer Science		3 hours
	<ul style="list-style-type: none"> <li>CMPSC 3000 Data Structures*</li> <li>CMPSC 4000 Algorithms*</li> </ul>	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.).