

Major:

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

Departments/Programs:

Mathematics and Computer Science

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.

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

<b>Technical Foundations</b>	<b>20 hours</b>
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
<b>Statistics</b>	<b>2-4 hours</b>
Take one of the following:	
<ul style="list-style-type: none"><li>BUSAD 2100 Business and Economic Statistics</li><li>MATH 1300 Statistics</li><li>MATH 3300 Mathematical Statistics I</li><li>POLSC 2000 Introduction to Political Science Statistics</li><li>PSYCH 2100 Psychological Statistics</li><li>SOC 2910 Social Statistics</li></ul>	2-4 hours
<b>Communication</b>	<b>4 hours</b>
Take one of the following:	
<ul style="list-style-type: none"><li>COMM 4100 Communication in the Professions</li><li>COMM 3200 Persuasive Communication</li><li>COMM 3800 Communication through Dialogue</li></ul>	4 hours
<b>Concentration (Choose one)</b>	<b>6 hours</b>
Advanced Data Analytics	
<ul style="list-style-type: none"><li>DATA 3200 Principles and Techniques of Data Analytics I*</li><li>DATA 3300 Principles and Techniques of Data Analytics II*</li></ul>	3 hours 3 hours
Business	
<ul style="list-style-type: none"><li>BUSAD 3100 Managing Information Systems</li><li>BUSAD 3300 Quantitative Methods</li></ul>	3 hours 3 hours

Concentration (Choose one)	6 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 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.F.A., B.M., B.S.N.).**