DATA ANALYTICS MINOR

Program Description

As society becomes increasingly dependent on data, new knowledge, skills, and professions are emerging to collect, organize, interpret, and use data. Data analytics uses data-driven techniques to transform raw data into useful information — information that may be used to identify and solve problems, evaluate claims and make inferences, and influence human decisions and machine models.

Data Analytics is used in nearly every professional domain, including business and government, health and social services, and science and education. The minor in Data Analytics is an excellent supplement to any major, providing valuable skills for employment in many careers.

Entering and Completing the Minor

In order to earn a degree, you must complete at least one academic major. Minors are not required except for students in the Professional Studies (BA). SPU encourages students to explore various academic paths, including minors, so if you change your mind about a minor or want to include an additional minor, you are able to do so as outlined below.

Note that the University encourages you to enter your chosen minor(s) as soon as you have determined it and are eligible to join it, especially by the start of your junior year. Students who transfer as juniors and seniors should enter a minor within their first two quarters at SPU.

- If this is your first quarter at SPU, request entrance to your minor in Banner by following these instructions (https://spu.atlassian.net/l/cp/Th4S0jCE/).
- If you are an SPU student with an SPU cumulative GPA of 2.0 or better, follow these instructions (https://spu.atlassian.net/l/cp/Th4S0jCE/) to enter a minor in this department.
- The University requires a grade of C- or better in all classes that apply to a minor; however, programs may require higher minimum grades in specific courses. You may repeat an SPU course only once for a higher grade.
- To advance in this program, meet with your faculty advisor regularly to discuss your grades, course progression, and other indicators of satisfactory academic progress. If your grades or other factors indicate that you may not be able to successfully complete the minor, your faculty advisor can work with you to explore options, which may include choosing a different minor.
- You must complete the minor requirements that are in effect in the SPU Undergraduate Catalog for the year you enter the minor.

Data Analytics Minor

30 credits total, including 15 upper-division

Code	Title	Credits
Data Analytics Core		
MAT 3380	Introduction to Data Science	5
or DAT 3380	Introduction to Data Science	
DAT 4500	Data and Society	5
Section Credits Required		10
Introductory Statistics [1]		
BUS 2700	Statistics for Business and Economics	
CRIM 2360	Introduction to Statistics in Social and Behavioral Sciences	
or PSY 2360	Introduction to Statistics in Social and Behavioral Sciences	
or SOC 2360	Introduction to Statistics in Social and Behavioral Sciences	
EGR 2200	Engineering Probability and Statistics	
or MAT 2200	Engineering Probability and Statistics	
MAT 2360	Introduction to Statistics for the Sciences	
Section Credits Required		5
Regression Modeling		
BIO 4360	Biostatistics	
BUS 3700	Quantitative Methods for Decision Making	
MAT 3333	Statistical Modeling	
PSY 4428	Advanced Statistical Analysis	
Section Credits Required		5
Electives from Two Different Disciplines (10-12 credits to total 30)		
BUS 4650	Data Analytics and Visualization	
CSC 1130	Beginning Programming	
CSC 1230	Problem Solving and Programming	
CSC 1250	Problem Solving and Programming	
CSC 2230	Computer Programming for Engineers	
CSC 3011	Living in a Digital World	
CSC 4410	Database Systems	
CSC 4800	Advanced Issues in Computer Science	
DAT 4380	Introduction to Machine Learning	
JRN 3203	Data Journalism	
LIN 2500	Computational Linguistics I	
LIN 4500	Computational Linguistics II	
MAT 2401	Linear Algebra	
MAT 3360	Probability and Statistics	
MAT 4363	Mathematical Statistics	
PSY 3448	Tests and Measurements in Psychology	
PSY 3588	Psychological Research Methods	
PSY 4430	Data Analytics and Storytelling for Consumer and Social Sciences	
SOC 4751	Sociological Research Methods	
Section Credits Required		10
Total Credits		**30**

[1] Introductory Statistics course to be taken before MAT 3380