

Data Science and Analysis BS

General Education Requirements

Students must satisfy the university general education requirements. Many of the courses for the degree may be used to fulfill math proficiency, information literacy, social science, and math and life/natural sciences requirements. **The program recommends students take ENGL 3130, Technical Writing or ENGL 3120, Business Writing, to satisfy the Junior-Level Writing requirement.** Emphasis areas may require one of these courses. There is no foreign language requirement for the degree.

Satisfactory/Unsatisfactory Option

Courses required for the major may not be taken on a satisfactory/unsatisfactory basis.

Degree Requirements

The BS in Data Science and Analysis consists of a set of core courses along with an emphasis area.

Core Course

MATH 1800	Analytic Geometry and Calculus I ¹	3-5
or MATH 1100	Basic Calculus	

Statistics Course **3**

The Introduction to Statistics course should align with the student's Discipline Emphasis Area.

Choose one of the following:

SOC/ANTHRO 3220	Quantitative Data Analysis in Social Science Research	
BIOL 4122	Biostatistics	
ECON 3100	Economic Data and Statistics	
CRIMIN 2220	Statistical Analysis in Criminology and Criminal Justice	

MATH 1320	Introduction to Probability and Statistics
PSYCH 2201	Psychological Statistics
POL SCI 3000	Political Analysis
SCMA 3300	Business Analytics and Statistics

Additional Required Courses

MATH 4005	Exploratory Data Analysis with R	3
CMP SCI 1250	Introduction to Computing	3
CMP SCI 4200	Python for Scientific Computing and Data Science	3
CMP SCI 4342	Introduction to Data Mining	3
Total Hours		18-20

¹ Students interested in the Computer Science emphasis area, the Mathematics Emphasis Area, or in taking additional mathematics courses should take MATH 1800.

If other departments are affected by this proposal, please secure "sign-offs" and indicate for each department the following:

Department	Contact Person	Phone #	Objections
Computer Science	Cezary Janikow		No
Sociology	Jim Craig		No
Biology	Wendy Olivas		No
Supply Chain Management	Haitao Li		No
Psychology	Michael Griffin		No
Mathematics	Erika Gibb		No
Economics	Michael Allison		No

Justification for request:

Making explicit the recommendation to take Technical or Business Writing for the Jr Level Writing requirement.