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. Students must earn a minimum grade of C- in all core courses and emphasis area courses.

Core Courses

~~Core~~ Calculus 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 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 [2]	3
or MATH 4250	Introduction to Statistical Methods in Learning and Modeling	
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.

[2] MATH 4250 is available for Mathematics Emphasis Area students

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	Craig		No
Biology	Zolman		No
Supply Chain Management	Li		No
Psychology	Taylor		No

Department	Contact Person	Phone #	Objections
Economics	Michael Allison		No
Mathematics	Clingher		No

Justification for request:
Cleaned up mistyped courses.
Updated what has become a traditional substitution for math emphasis students.
Added a "c-" minimum for all core and emphasis courses.