DATA SCIENCE, MINOR

Program Overview

The Minor in Data Science provides a rigorous study of the data analysis lifecycle with a foundation of computer programming and statistics. This minor is designed for students who want to supplement their major domain with the knowledge and skills needed to manage and analyze large data sets.

Learning Outcomes

- Students completing the program will have the ability to apply theory, techniques, and tools throughout the data analysis lifecycle and employ the resulting knowledge to satisfy stakeholders' needs.
- Students completing the program will have the ability to apply principles of computing and statistics to identify solutions for data intensive applications.

Undergraduate Policies

For undergraduate policies and procedures, please review the Undergraduate Academics section of the General Bulletin.

Program Requirements

The Minor in Data Science consists of six courses and 18 credit hours:

Code	Title	Credit Hours
Required Courses:		
CSDS 132	Programming in Java	3
CSDS 133	Introduction to Data Science	3
CSDS 234	Structured and Unstructured Data	3
STAT 301	Introduction to Probability for Statistics	3
or STAT 312	Basic Statistics for Engineering and Science	
or STAT 312R	Basic Statistics for Engineering and Science Using R Programming	
or MATH 380	Introduction to Probability	
CSDS 312	Introduction to Data Science Systems	3
or CSDS 313	Introduction to Data Analysis	
Elective		**3**
Choose one of the following:		
CSDS 233	Introduction to Data Structures	
CSDS 302	Discrete Mathematics	
CSDS 312	Introduction to Data Science Systems	
CSDS 313	Introduction to Data Analysis	
CSDS 335	Data Mining for Big Data	
CSDS 340	Introduction to Machine Learning	
CSDS 341	Introduction to Database Systems	
MATH 201	Introduction to Linear Algebra for Applications	
MATH 307	Linear Algebra	
STAT 325	Data Analysis and Linear Regression Models	
STAT 326	Multivariate Analysis and Data Mining	
STAT 346	Mathematical Statistics	
Total Credit Hours		**18**

Students interested in pursuing graduate work in data science are encouraged to take CSDS 233 and MATH 201 or MATH 307.