

DATA SCIENCE, MINOR

Program Description

The program covers concepts such as probability, inference, regression, and machine learning and helps you develop an essential skill set that includes R programming, deeper knowledge of probability and statistics, and learn tools to analyze big data sets and to design of the experiments.

Admissions Requirements

To be enrolled in the university as a math or science major. To be enrolled in the university. Calculus I, Calculus II, and some programming skills required. Calculus III preferred.

Program Requirements

| Code | Title | Hours |
|--------------------------------|---|-----------|
| CORE COURSES: | | |
| MATH 3342 | Applied Probability and Statistics | 3 |
| or MATH 3345 | Statistical Modeling and Data Analysis | |
| MATH 3347 | Introduction to Probability | 3 |
| MATH 3349 | Principles of Data Science | 3 |
| MATH 3311 | Linear Algebra | 3 |
| Electives | | |
| Select three of the following: | | 9 |
| MATH 3300 | Geospatial Mathematical Techniques | |
| or GISC 3300 | Geospatial Mathematical Techniques | |
| MATH 3385 | Linear Optimization and Decisions | |
| COSC 4345 | Introduction to Machine Learning | |
| MATH 4321 | Applied Regression Analysis | |
| MATH 4342 | Introduction to Mathematical Statistics | |
| MATH 4385 | Applied Modeling | |
| Total Hours | | 21 |