

B.S. in Statistics - Applied Statistics Option (effective Fall 08)

Recommended for students interested in the application of statistics to the biological and social sciences

Preparatory Subject Matter (26-31 units)

- MAT 16A-B-C or 17A-B-C or 21A-B-C Calculus (21 series recommended)
- MAT 22A Linear Algebra
- ECS 30 Intro to Programming and Problem Solving *or* ECS 40 Intro to Software Development and Object-Oriented Programming
- 2 Introductory courses serving as the prerequisites to upper division courses in a chosen discipline to which statistics is applied
- Any one introductory statistics course except STA 10

Depth Subject Matter (51-56 units)

- STA 106 Analysis of Variance
- STA 108 Regression Analysis
- STA 138 Analysis of Categorical Data
- STA 141 Statistical Computing *or* STA 141A Fundamentals of Statistical Data Science
- STA 130A-B Mathematical Statistics: Brief Courses

Three courses from:

- STA 104 Nonparametric Statistics
- STA 135 Multivariate Data Analysis
- STA 137 Applied Time Series Analysis
- STA 141B Data & Web Technologies for Data Analysis *or* STA 141C Big Data & High Performance Statistical Computing
- STA 144 Sampling Theory of Surveys
- STA 145 Bayesian Statistical Inference
- STA 160 Practice in Statistical Data Science

Five upper division elective courses outside of statistics:

The electives are chosen with and must be approved by the major advisor. They should follow a coherent sequence in one single discipline where statistical methods and models are applied. At least three of them should cover the quantitative aspects of the discipline. Please confer with the major advisor for a list of recommended courses.