



Statistics

From managing the impacts of climate change to analyzing sports player performance, careers that use statistics to draw valuable conclusions from data and diverse and growing. Statistical analysis can aid in solving societal, industrial, environmental, and even sports challenges

Major

A major in statistics requires 11 units: eight foundational courses and three electives. Majors must also have a computing component and a senior-year experience which may be counted as electives.

- **Foundational Courses**

STAT 113. Applied Statistics	MATH 135. Calculus 1
STAT 213. Applied Regression Analysis	MATH 136. Calculus 2
STAT 234. Foundations of Data Science	MATH 205. Multivariable Calculus
STAT 325. Probability	MATH 217. Linear Algebra
STAT 326. Mathematical Statistics	

- **Electives**

Two at the 200-level or above and one at the 300-level or above. MATH 280, MATH 305, and CS 219 may count as electives. At least two of the electives must be from STAT.

Senior Year Experience (SYE)

Students must fulfill a Senior-Year Experience (SYE) requirement either in mathematics as one of the 11 units in the major or by completing an SYE outside the major.

For SYEs within the department, you have 3 choices:

- Take an SYE seminar (MATH/CS/STAT 450)
- Do an independent SYE project with a department faculty member (MATH/CS/STAT 489)
- Do an independent HONORS SYE project with a department faculty member (MATH/CS/STAT 498)
- Do an internship approved by the department chair.

Minor

A minor in statistics requires five units, of which at least three must be in Statistics (i.e., have a STAT prefix). The remaining two units can be either from Statistics or from among the options

listed below. Additionally, one of the two non-STAT units may be an independent study/honors project without a STAT prefix that involves substantial statistical analysis.

BIOL 303. Biostatistics

CHEM 342. Thermodynamics and Kinetics

ECON 200. Quantitative Methods in Economics

GEOG 233. Geographic Information Systems

PSYC 205. Research Methods in Psychology

SOC 301. Quantitative Methods