

STATISTICS, B.S.

The Bachelor of Science degree program provides a strong basis in both applied and theoretical statistics and prepares students for a variety of careers. Students will demonstrate the ability to perform fundamental statistical analyses and to prepare informative graphics for public presentations. They will gain mastery of probability and mathematical statistics as well as the use of statistical programming languages and improve technical writing and presentation skills.

Statisticians are in great demand and work in various settings including finance, insurance, banking, survey research, government agencies, and e-commerce. "Statistician" and "data scientist" are consistently ranked among the top jobs for graduates due to their high demand and excellent salaries. There are two options under the B.S. in Statistics degree program: the General Major and the Major with a Concentration in Actuarial Science, designed for students planning a career as an actuary. Statistics is also an ideal double major to gain analytical skills to complement a primary field of study.

Learning Outcomes

1. Students will demonstrate the ability to perform fundamental statistical analyses and to prepare informative graphics for public presentation.
2. Students will demonstrate a mastery of probability and mathematical statistics at the mathematical level of calculus and linear algebra.
3. Students will demonstrate the ability to use statistical programming languages.
4. Students will demonstrate competency in technical writing and presentation.

Retention

To be retained in the program, a student must obtain a grade of C or higher in at most two attempts in all mathematics, computer science, and statistics courses required for graduation.

Transfer Requirement

Any student applying to transfer to the statistics major from other programs within the University, or from other accredited colleges and universities, is required to have earned a grade of "B" or higher in at least one of the following courses, or their equivalent: USC's MATH 141, MATH 142, STAT 509, or STAT 515. An AP or IB exam score that provides credit for MATH 142 also satisfies this requirement. STAT 509 and STAT 515 are advanced undergraduate courses. This requirement is in addition to the minimum University and College of Arts and Sciences requirements.