College of Arts and Sciences

Department of Statistics

University of South Carolina

# The Science of Data

Statistics uses math, computing, problem solving, and communication skills to collect, describe, analyze, and interpret data.

# **A Head Start for Your Career**

Majoring in statistics can give you a head start to a great career! CNBC reported recently that the research group Career Cast has rated "Statistician" as the #1 overall job for 2017!

Source: httpS://www.cnbc.com/2017/04/26/these-are-the-ten-best-jobs-of-2017.html

### **Actuarial Science**

The statistics major is great training for those who want to be actuaries and build valuable models to guide insurance companies in pricing their policies. Being an actuary can be a very stable, lucrative, and worthy career. The concentration in actuarial science, within the statistics major, is great preparation for several of the actuarial exams /including exam P and exam FM).

#### **Data Science**

Data science and "big data analytics" are hot areas these days, as companies are realizing the value of learning from large data sets. The Statistics and Computer Science and Engineering Departments have joined forces to offer a minor in data science. Courses such as Multivariate Statistics (STAT 530), Big Data Analytics (STAT/CSCE 587), and Advanced SAS Programming (STAT 541), provide excellent training for budding data scientists.

#### **Graduate School in Statistics**

Our B.S. program provides an excellent springboard to graduate study in statistics, biostatistics, or data science, for those who plan to pursue master's or doctoral degrees. Statistics has recently been rated the #1 graduate degree for jobs by Fortune.

Source: http://fortune.com/2015/04/27/best-worst-graduate-degrees-jobs/

# **Secondary Education**

A statistics major with a minor in Secondary Education Mathematics can qualify for the fifth-year Master of Teaching Program that allows one to be certified as a high school math teacher.

## **First Steps**

If you have had a previous statistics course in high school or college, or have credit for MATH 141, consider taking STAT 515 as soon as possible.

The Statistics Major begins with courses in applied statistics and data analysis (STAT 515 and 516) and the calculus sequence (MATH 141-142-241). It then follows with courses in programming (STAT 540) and statistical theory (STAT 511-512-513).

Statistics electives are available to train you in actuarial science, statistical computing, data science/big data analytics, and graduate school preparation.

Statistics makes a great double major with another area of study! If that interests you, schedule meetings with both departments as soon as possible. To stay on track for the statistics degree, take STAT 515 and the calculus sequence (MATH 141-142-241) as soon as possible. The double major works especially well with math and economics, where some of the courses overlap.

The minor in statistics is another valuable way to supplement your major area of study with expertise in data analysis. The statistics minor requires six statistics courses at the 500-level. It can be done either with or without calculus, but typically requires at least four semesters so that the prerequisites fit in.

Contact David Hitchcock, Undergraduate Director, at hitchcock@stat.sc.edu or visit www.stat.sc.edu for more information.



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