

What can I do with a major in Statistics

The University of Georgia Career Center
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This information describes typical occupations and employment settings associated with this major. Understand that some of these options may require additional training. Moreover, you are not limited to these options when choosing a possible career path.

Description of Statistics

Statistics has been described as the science of learning from data: everything from planning for the collection of data and data management, to end-product activities such as drawing conclusions from data and presentation of results. Statistics includes the scientific application of mathematical principles to the collection, analysis, and presentation of data. Statisticians contribute to the design of surveys and experiments; collection, processing, and analysis of data; and interpretation of the results. Statisticians apply their methods in all subject areas. Sampling-obtaining information about a population of people or group of things by surveying a small portion of the total is often used. Statisticians determine the where and how of data, determine the type and size of the sample group, instructions and procedures for the sampling collection, tabulate the data and final analysis, interpretation and summary using computer software.

Researching Job Titles and Careers

O*NET <http://online.onetcenter.org> (click on Find Occupations)

Occupational Outlook Handbook <http://www.bls.gov/oco> (type in general term for career of interest)

Georgia Career Information Center <http://www.gcic.peachnet.edu> (accessible only on campus computers)

Career Insider: Vault Guides http://career.uga.edu/resources/online_resources (Under the “Resources” tab and select “Online Resources”)

Candid Career http://career.uga.edu/resources/online_resources (View professionals speaking about their careers under the “Resources” tab and select “Online Resources”)

Possible Job Titles

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|------------------------------|--------------------------------|------------------------------|
| Actuary | Cryptographer/Cryptologist | Psychometrist |
| Aerospace Engineer | Data Analytics Associate | Quality Assurance Analyst |
| Appraiser | Debate Program Advisor | Research Analyst |
| Asset Manager | Econometrician | Risk & Insurance Specialist |
| Benefits Administrator | Foreign-Exchange Trader | Robotics Programmer |
| Biometrician/Biostatistician | Information Scientist | Statistical Software Support |
| Budget Analyst | International Trade Specialist | Statistician |
| Claims Adjuster | ISO 2000 Specialist | Stock Analyst |
| Computer Programmer | Mathematician | Supply Chain Analyst |
| Computer Test Specialist | Numerical Analyst | Technical Writer |
| Contract Administrator | Operations Research Analyst | Underwriter |
| Cost Estimator/Analyst | Public Health Statistician | |

Possible Employers

| | | |
|----------------------------|---------------------------------|------------------------------------|
| Aerospace Companies | Justice Department | Research & Dev. Firms |
| Bureau of Labor Statistics | Kennecott Ridgeway Mining Co. | Sam's Club |
| C & L Business Equipment | Library of Congress | Sharp Shooter, Inc Research Social |
| Colleges & Universities | Logistics | Science Pollsters |
| Defense Logistics Agency | Market Research | Test Development Corp. |
| Defense Mapping Agency | NASA | T.E. Properties, Inc. |
| Employment & Training Adm. | Nat. Hwy Traffic Safety Admin. | Transportation Department |
| Engineering Technician | National Inst. Standards & Tech | University of Michigan |
| Google | National Security Agency | U.S. Customs Service |
| Housing & Mortgage Fin. | NOAA | U.S. Navy |
| Investment Firms | PRC Environmental Mgmt. | Weights and Measures Office |

To learn what types of positions and companies UGA students are working with, see the UGA Career Center Post Graduation Survey at www.career.uga.edu/gradsurveyresults/ and search for alumni on Linked In at www.linkedin.com.

Campus Resources

Statistics Department - <http://www.stat.uga.edu/>

Undergraduate Listserv - <http://listserv.uga.edu/archives/statundergrad-l.html>

Statistics Club at UGA – For more information, visit: <http://www.stat.uga.edu/>

To find additional clubs and organizations, go to the Center for Student Organizations at- <http://stuorgs.uga.edu/find/index.html>

Connect with your Career Consultant <http://career.uga.edu/contact#careerconsultants>

Employment Websites

GENERAL:

CareerSearch http://career.uga.edu/resources/online_resources (Research employers by location and/or industry)

DAWGlink www.career.uga.edu/ (login with your UGA MyID and password)

GoinGlobal (To access GoinGlobal, login to your DAWGlink account)

Idealist www.idealists.org/ (nonprofit jobs)

USAJobs www.usajobs.gov/ (federal jobs)

MAJOR/CAREER SPECIFIC:

Statscareer.com - <http://www.statscareers.com/>

Bureau of Labor Statistics - <http://www.bls.gov/jobs/>

Environmental Protection Agency - <http://www.epa.gov/careers/>

Royal Statistical Society Careers - <http://www.rss.org.uk/site/cms/contentChapterView.asp?chapter=10>

Global Actuarial Recruitment, D.W. Simpson - <http://www.actuaryjobs.com/>

Careers in Finance - <http://www.careers-in-finance.com>

Professional Information Resources

Institute of Mathematical Statistics - <http://www.imstat.org/>

The Biometric Society - <http://www.biometricsociety.org/>

International Association for Statistical Education - <http://www.stat.auckland.ac.nz/~iase/>

International Biometric Association - <http://www.enar.org/>

International Statistical Institute - <http://www.isi-web.org/>

Society for Industrial and Applied Math - <http://www.siam.org/>

We Use Math-Information on Careers in Math - <http://weusemath.org/>

Be An Actuary-Information on Careers in Actuarial Science - <http://www.beanactuary.org/>

Tip: Join LinkedIn groups that are related to your career interest. Need help finding groups? Check out the Groups You May Like link under the Interests/Groups tab. Review the groups that professionals in your field of interest have joined and consider joining them as well.

Additional Career Consultant Recommendations:

The Science of Statistics

Statisticians do more than just churn out unemployment numbers. They design research, formulate results, and turn those results into meaningful information that non-statisticians can use. Statistics also predict outcomes using data from the past. Almost every industry employs data analysts—from marketing to environmental science—and the work, though not always visible, has a big impact. The following are a few industries that have seen an increased need for statisticians:

Government

The government is one of the largest employers of statisticians, with a need to fill a variety of functions, from studying crime patterns at The Department of Justice to analyzing traffic congestion at The Department of Transportation. The U.S. Census Bureau will also need statisticians to turn out and analyze the nation's demographics for the 2010 Census. The information will affect policies in areas, such as education and infrastructure, and determine how many representatives each state sends to the House of Representatives.

Pharmaceuticals/Healthcare

As the pharmaceutical industry grows, so does the need for statisticians to design clinical trials, collect information about drugs' effects, and test thousands of chemical compounds to find which ones cure which ailments. Bioinformatics, which uses biological data, such as gene sequences to solve medical problems, is another growing area in healthcare that needs statisticians.

Manufacturing

Here statisticians work in quality control and design. Green energy manufacturing is especially important. "If you want to design a wind turbine, you need to figure out what direction it should be pointing in and how long the rotors should be," says Carriquiry. "A statistician can predict where the wind is going to come from and what strength it is going to have using information from the past."

Business

In today's frugal climate, statisticians play an important role because they can help businesses predict which products will be successful and what marketing will work. They can also act as actuaries, determining and managing risk for financial services and insurance companies.

Financial Services

The world of personal and corporate finance provides a work setting where statisticians can help individuals and businesses with financial management, interpreting financial markets and institutions, and providing financial planning.

Research & Development

Statisticians involved with R& D help find solutions to specific research problems and facilitate the development of new research skills and services that advance the research environment.

Consulting

A consultant uses the art and science of statistics to solve a practical problem. Problems come from many different fields, e.g. marketing, product design, manufacturing, medicine, agriculture, or genetics, but many of us specialize in just a few application areas.

From "Doing the Math: Careers in Statistics" by Cara Scharf

<https://www.wetfeet.com/articles/doing-the-math-careers-in-statistics>