

Career Spotlight

Statistician

Statistics is the scientific application of mathematical principles to the collection, analysis, and presentation of numerical data. Statisticians apply their mathematical and statistical knowledge to the design of surveys and experiments; the collection, processing, and analysis of data; and the interpretation of the experiment and survey results.

Opinion polls, statements of accuracy on scales and other measuring devices, and information about average earnings in an occupation are all usually the work of statisticians.



EDUCATION

A master's degree in statistics or mathematics is the minimum educational requirement, but research and academic jobs generally require a Ph.D.; Federal Government jobs require at least a bachelor's degree.

WHEN MATH IS USED

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POTENTIAL EMPLOYERS

About 20 percent of jobs are in the Federal Government, where statisticians are concentrated in the Departments of Commerce, Agriculture, and Health and Human Services. Another 10 percent are found in State and local governments, including State colleges and universities. Most of the remaining jobs are in private industry, especially in scientific research and development services, insurance carriers, and pharmaceutical and medicine manufacturing.

FACTS

Statistician was rated as the third most satisfying job in a recent poll of worker satisfaction. Statisticians are hired by professional sports teams to analyze teams and players and to determine the probability a particular play be executed successfully.

CITATIONS

<http://stats.bls.gov/oco/ocos045.htm>

<http://online.wsj.com/article/SB123119236117055127.html>

<http://stats.bls.gov/oes/current/oes152041.htm>

<http://statistics.byu.edu/index.php>

<http://mathmajor.org/careers/statistician/>

MATH REQUIRED

- College Algebra
- Trigonometry
- Calculus I, II, III
- Linear Algebra
- Ordinary Differential Equations
- Theory of Analysis
- Mathematical Models

Low-end Salary: \$39,840/yr

Median Salary: \$73,880/yr

High-end Salary: \$199,710/yr