

# Statistics



## An Overview...

Statistics deals with the collection, analysis, and presentation of numerical data to make informed decisions. Statisticians design, carry out and interpret the numerical results of surveys and experiments. They use statistical techniques to predict population growth or economic conditions, develop quality control tests for manufactured products, assess the nature of environmental problems, or help business managers and government officials make decisions and evaluate the results of new programs.

Quantitative analyses help organizations operate in the most efficient and effective manner possible. They use scientific method and mathematical programming to analyze various problems so they can evaluate policy alternatives and choose the course of action that suits them best. They solve problems in the areas of inventory control, personnel schedules, forecasting, resource allocation, product mix and distribution systems.

## Skills:

Background in quantitative methods  
Ability to use quantitative software  
Good oral and written communication skills

Capacity to think logically  
Ability to work well with others  
Excellent attention to detail

## Hiring Organizations:

Actuary Practices  
Applied Mathematicians  
Auto & Truck Manufacturers  
Census Bureau  
Colleges/Universities  
Communication Firms  
Construction Services  
Consultant Firms

Forecasting Companies  
Federal Government  
Finance Companies  
Health Care Companies  
Hospitals  
Information Technology Depts  
Insurance Companies

Investment Firms  
Law Firms  
Marketing Firms  
Manufacturing Firms  
Market Research Companies  
Telecommunication Firms  
Transportation Firms

## Professional Organizations:

American Statistical Association  
732 North Washington Street  
Alexandria, VA 22314-1943  
(703) 684-1221  
(888) 231-3473  
[www.amstat.org](http://www.amstat.org)  
email: [asainfo@amstat.org](mailto:asainfo@amstat.org)

Institute of Mathematical Statistics (IMS)  
Business Office  
P.O. Box 22718  
Beachwood, OH 44122  
1.216.295.2340  
[www.imstat.org](http://www.imstat.org)  
email: [ims@imstat.org](mailto:ims@imstat.org)

Institute for Operations Research and the  
Management Sciences  
7240 Parkway Drive, Suite 310  
Hanover, MD 21076-1310 USA  
443-757-3500  
[www.informs.org](http://www.informs.org)  
[informs@informs.org](mailto:informs@informs.org)