

CAREERS IN MATHEMATICS

Mathematics is at the heart of many of today's advancements in science and technology and is contributing to progress in other fields such as industrial and architectural design, economics, biology, linguistics, and psychology. Studying mathematics can provide you with a competitive advantage in many fields, and can also give you a firm foundation for further study in a variety of other disciplines.

Did you know that mathematics majors traditionally score highest on the Law School Admission Test (LSAT)? (<http://www.phil.ufl.edu/ugrad/whatis/LSAT-table.html>)

A recent survey* shows that the top 15 highest-earning college degrees have a common element: mathematics. One of the top skills employers are looking for in mathematics majors is their analytic abilities.

(*<http://www.forbes.com/sites/jennagoudreau/2012/05/15/best-top-most-valuable-college-majors-degrees/>)



EXAMPLES OF JOBS WITH A DEGREE IN MATHEMATICS

Actuarial, Business and Finance	Computer and Information Sciences	Statistics	Emerging Fields	Teaching, Research and Other
Actuary	Computer and Information Research Scientist	Biomathematician	Computational Biology and Genomics	College or University Professor
Applied Mathematician	Computer Programmer	Biometrician	Computer Animation, Digital Imaging	College or University Instructor
Communications Engineer	Computer Systems Analyst	Demographer	Data Mining	Teacher (Elementary to Secondary)
Benefits Specialist	Cryptanalyst	Econometrician	Neuroscience	Meteorologist
Economic Analyst	Database Administrator	Psychometrician	Materials Science	Numerical Analyst
Financial Analyst	Operations Research Analyst	Quality Control Analyst		Engineering Analyst
Investment Analyst	Software Developer	Statistician		
Investment Manager	Systems Analyst			
Market Research Analyst	Information Scientists			
Product Developer				

HIGHLIGHTS

Actuarial Science: Actuarial science takes mathematics and statistics and applies them to finance and insurance. Actuarial science includes a number of interrelating disciplines, including probability, statistics, finance, and economics. Actuary is consistently among the highest paying jobs in the country.

Biomathematics: Mathematical biology (biomathematics) is an interdisciplinary field of study. It models natural and biological processes using mathematical techniques and tools. Results have been applied to areas such as cellular neurobiology, epidemic modelling, and population genetics.

Computer Science: Computer science is the study of the theoretical foundations of information and computation and their implementation and application in computer systems. Mathematicians, with their training in logical and precise thinking, are highly prized in this field.

Cryptography: Cryptography is the practice and study of hiding information. Cryptography is considered to be a branch of both mathematics and computer science. The NSA is the largest employer of mathematicians in the country (http://www.nsa.gov/research/tech_transfer/advanced_math/).

Finance: Finance is a field that studies and addresses the ways in which individuals, businesses, and organizations raise, allocate, and use monetary resources over time, taking into account the risks entailed in their projects. Mathematicians can build models to help explain and predict the behavior of financial markets.

Operations Research: Operations research is an interdisciplinary branch of mathematics which uses mathematical methods to arrive at optimal decisions to problems in maximizing or minimizing things like costs or profits. The eventual intention behind using Operations Research is to elicit a best possible solution to a problem mathematically, which improves or optimizes the performance of the system.

Teaching: The teaching of mathematics at the K-12 level is a high-demand field and the need is expected to grow in the future.