

## MATHEMATICS / ACTUARIAL SCIENCE- Career Resource Guide

### Potential Career Options

Below is a sample of related career options; for some, additional experience and/or further education may be helpful or required.

<b>Actuarial Analyst</b>	Use mathematics, statistics, and financial theory to assess the risk that an event will occur and help businesses and clients develop policies that minimize the cost of that risk.
<b>Applied Mathematician</b>	Use theories and techniques to solve problems.
<b>Data Analyst/Scientist (Predictive Analytics)</b>	Take raw data and combine it with analysis to make it more assessable and valuable to a company. Manage digital data collections.
<b>Financial Analyst</b>	Provide guidance to businesses and individuals making investment decisions. Assess the performance of stocks, bonds, and other types of investments.
<b>Mathematics Teacher</b>	Instruct mathematical topics such as algebra, geometry, calculus, statistics and trigonometry to middle school and high school students.
<b>Operations Researcher</b>	Assist organizations in coordinating and operating in the most efficient manner possible by applying mathematical principles.
<b>Statistician</b>	Collect, analyze, interpret and present numerical data for problem solving.
<b>Theoretical Mathematician</b>	Develop previously unknown relationships between existing mathematical principles.

### Sample Job Titles

Actuarial Analyst	Operations Research Analyst
Applied Mathematician	Psychometrician
Claim Manager	Reimbursement Analyst
Computer Applications Engineer	Reporting Analyst
Demographer	Risk Management Associate
Financial Analyst	Statistician/Statistical Analyst
Loan Analyst	Underwriter

### Career Information Resources

Vault is a comprehensive career resource that includes industry and profession overviews; rankings and profiles for employers and internship programs; a job and internship database; career articles, blogs and videos; sample resumes, cover letters and interview questions; and over 100 career guides. A selection of the Vault Guides is listed below.

<b>Career Launcher:</b> Education	<b>Vault Guide to...</b> Actuarial Careers Education Jobs Insurance Jobs Mathematics and Physics Jobs
<b>Vault Career Guide to...</b> Insurance	

**Note:** Refer to the CPDC website for a link to Vault as well as the CPDC Tip Sheets and Handshake job postings.

### Associations/Societies

American Mathematical Society *	www.ams.org
American Statistical Association *	www.amstat.org
Association for Women in Mathematics *	www.awm-math.org
Casualty Actuarial Society *	www.casact.org
Mathematical Association of America *	www.maa.org
National Council of Teachers of Mathematics *	www.nctm.org
Society for Industrial and Applied Mathematics *	www.siam.org
Society of Actuaries *	www.soa.org

\* Contains employment listings

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## Career & Employment Websites

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Actuary.com	www.actuary.com
American Banker Online (Resource Center- Career Zone)	www.americanbanker.com
Bankjobs.com	www.bankjobs.com
Be an Actuary	www.beanactuary.com
Mathematical Sciences Career Information	www.ams.org/careers
Occupational Outlook Handbook- Search Actuaries and Mathematicians	www.bls.gov/ooh/math/home.htm
PA – Educator.Net	www.paeducator.net
Society for Industrial and Applied Mathematics	www.siam.org
Society of Actuaries	www.soa.org

**Note:** A helpful list of general job search websites is available on the Internet Tip Sheet at [www.rmu.edu/cpdc](http://www.rmu.edu/cpdc).

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## Selected RMU Activities & Organizations

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Actuarial Science Club	Office of Engaged Learning & Community Involvement
Association of Computing Machinery	Society for the Advancement of Management
Association of Future Accountants	Student Government Association
Financial Management Association	Student – Pennsylvania State Education Association
Mathematics Club	Student Program Board

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## Bachelor-Level Internship Organizations

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Aetna	Life Insurance Company of North America
Buck Consultants	New York Life Insurance Company
Cigna	Principal Financial Group
Coventry Health Care	UPMC
Highmark Health	Willis Towers Watson
John Hancock	

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## Bachelor-Level Hiring Organizations

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### ACTUARIAL SCIENCE

Cigna  
Erie Insurance Group  
Geico  
Highmark Inc.  
John Hancock  
Mass Mutual Financial Group  
Mercer  
New York Life Insurance Company  
Penn Mutual  
Principal Financial Group  
State Farm  
The Hartford  
Transamerica Life Insurance Company  
UPMC Health Plan  
Willis Towers Watson

### MATHEMATICS

Academy Charter School  
BNY Mellon  
Brick Street Insurance  
Canon McMillan High School  
Cigna  
Compassion International  
Ernst and Young (EY)  
First Commonwealth Bank  
Forester's Financial  
Highmark Inc.  
National Grid  
Phi Delta Theta International Fraternity  
PNC Bank  
Wesbanco