

## MATHEMATICS/ACTUARIAL SCIENCE- Career Resource Guide

### Sample Career Options

<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>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.

### Related Job Titles

Actuarial Analyst	Operations Research Analyst
Applied Mathematician	Psychometrician
Computer Applications Engineer	Statistician/Statistical Analyst
Demographer	Teacher
Financial Analyst	Theoretical Mathematician
Meteorologist	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.

#### Career Launcher:

Education

#### Vault Career Guide to...

Insurance

#### Vault Guide to...

Actuarial Careers

Education Jobs

Insurance Jobs

Mathematics and Physics Jobs

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

### Associations/Societies

American Mathematical Society *	<a href="http://www.ams.org">www.ams.org</a>
American Statistical Association *	<a href="http://www.amstat.org">www.amstat.org</a>
Association for Women in Mathematics *	<a href="http://www.awm-math.org">www.awm-math.org</a>
Casualty Actuarial Society *	<a href="http://www.casact.org">www.casact.org</a>
Mathematical Association of America *	<a href="http://www.maa.org">www.maa.org</a>
National Council of Teachers of Mathematics *	<a href="http://www.nctm.org">www.nctm.org</a>
Society for Industrial and Applied Mathematics *	<a href="http://www.siam.org">www.siam.org</a>
Society of Actuaries *	<a href="http://www.soa.org">www.soa.org</a>

\* 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/careercenter](http://www.rmu.edu/careercenter).

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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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## Salary Information

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RMU Salary Survey	Mean	Range
Actuarial Science (2016)	\$63,355	\$40,000 - \$74,500
Actuarial Science (2015)	\$58,125	\$42,000 - \$80,000
Applied Mathematics (2014)	\$37,100	\$23,000 - \$48,000

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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 Inc.	Willis Towers Watson
John Hancock	

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## Bachelor-Level Hiring Organizations

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### ACTUARIAL SCIENCE

**Blue Cross & Blue Shield of Western NY** – Actuarial Analyst  
**Cigna** – Actuarial Senior Analyst  
**Erie Insurance Group** – Actuarial Analyst  
**Geico** – Actuarial Analyst  
**Highmark** – Actuarial Analyst  
**John Hancock** – Actuarial Assistant  
**Mass Mutual Financial Group** – Actuarial Analyst  
**Penn Mutual** – Actuarial Analyst  
**Principal Financial Group** – Pension Actuarial Analyst/Actuarial Asst.  
**State Farm** – Actuarial Analyst  
**Transamerica Life Insurance Company** – Actuarial Analyst  
**UPMC Health Plan** – Reimbursement Analyst  
**Willis Towers Watson** – Actuarial Analyst/Account Analyst

### MATHEMATICS

**Academy Charter School** – Math Teacher  
**BNY Mellon** – Corporate Action Senior Specialist  
**BNY Mellon** – Credit Product Admin I  
**Cigna** – Claim Manager  
**Compassion International** – Financial Analyst, Data Espionage  
**Ernst and Young (EY)** – Assurance Staff  
**Highmark Inc.** – Reporting Analyst  
**Phi Delta Theta International Fraternity** – Leadership Consultant  
**PNC Bank** – Loan Analyst  
**PNC Bank** – Risk Management Associate  
**Wesbanco** – Bank Teller