

# Linking Majors to Careers

## MATHEMATICS

# Mathematics

Mathematicians study concepts and theories to help them solve problems that involve quantitative relationships. Mathematics is basically broken into two fields - theoretical or pure math and applied math.

Theoretical mathematicians do research to discover new theories or principles and find new relationships between existing theories and principles. Colleges or universities and advanced research facilities typically employ students who go into this area.

Applied mathematicians develop techniques and find new approaches for solving problems in the sciences or in business and industry. These students are employed by numerous government agencies, engineering firms, banks, business corporations, and insurance companies, to name just a few.

Since mathematics is almost boundless, it can easily be incorporated with numerous other areas of study to help students direct their training in a more specific direction. The employment outlook is generally good to excellent for math majors, especially for students who have a minor or adequate training in computer science, physics, statistics, or business administration. The most common jobs for math majors will be found in the following industries: accounting, banking, computers, data processing and informational systems, insurance, manufacturing, real estate, securities, advertising, and software.

**SKILLS:** The person who majors in **Mathematics** at Regis University has the opportunity to learn a variety of essential **skills** such as:

- analytical skills
- logical thinking
- computer skills
- organizational skills
- developing ideas
- problem solving skills

**SOME TIPS ON GETTING A JOB IN THE MATHEMATICAL FIELD:**

1. Get a summer job in the area in which you are interested.
2. Have an internship in the area in which you are interested.

**RELATED JOBS:** Listed below are some career fields someone with a Math major may enter:

actuary	hydrologist	aerodynamics specialist
information scientist	air traffic controller	inventory specialist
auditor	market research analyst	bank examiner
mathematician	bank teller	media buyer
business manager	production manager	buyer, retail
purchasing agent/buyer	claims adjuster	securities analyst
computer programmer	statistician	credit manager
systems analyst	contract administrator	teacher, science/math
cryptologist	technical writer	editor, math publication
underwriter	engineering analyst	weight analyst
financial investment analyst	consultant	fundraiser
high school math teacher	military intelligence	researcher

## **WEB SITES RELATED TO MATHEMATICS:**

Cool Math: careers in math	<a href="http://www.coolmath.com/careers.htm">http://www.coolmath.com/careers.htm</a>
Careers in math	<a href="http://www.cln.org/themes/careers_math.html">http://www.cln.org/themes/careers_math.html</a>
Career Resources	<a href="http://www.awm-math.org">www.awm-math.org</a>
PLUS Magazine (math journal)	<a href="http://www.pass.maths.org">http://www.pass.maths.org</a>
Mathematics of Cartography	<a href="http://math.rice.edu/~lanius/pres/map/mapcar.html">http://math.rice.edu/~lanius/pres/map/mapcar.html</a>

## CAREER RESOURCES IN:

- CAREER SERVICES LIBRARY (CS)
  - DAYTON MEMORIAL LIBRARY (DM)
  - ON THE INTERNET
- 

### Career and Occupational Information

*Occupational Outlook Handbook* (CS, DM, and <http://www.bls.gov/oco>)

ONET <http://online.onetcenter.org>

*Adams Jobs Almanac* (CS, DM)

*Dictionary of Occupational Titles* (CS, DM)

*Great Careers for... series* (CS)

*Careers for ... series* (CS)

*Careers in ... series* (DM)

*Encyclopedia of Career and Vocational Guidance* (DM)

*Liberal Arts Career News* (CS)

### Professional Organizations

*National Directory of Non-Profit Organizations* (DM)

*Denver Meets* (DM)

*Encyclopedia of Associations* (link on DM online catalog)

Internet Public Library listing at: <http://www.ipl.org/div/aon>

### Employer Directories

*Reference USA* (link on DM online catalog)

*Denver Business Journal Top 25 Book of Lists* (CS, DM)

*Colorado Business Directory* (DM and available via link on DM online catalog)

*Directory of Colorado Manufacturers* (DM)

*Rocky Mountain High Tech. Directory* (DM)

*Almanac of American Employers* (DM)

*Job Banks for US cities* (CS, DM)

*Standard & Poor's Register of Corp. Directory* (link on DM online catalog)

*Thomas Register of American Manufacturers*  
<http://www.thomasregister.com>

*Directory of Colorado Non-Profits* (DM and <http://www.coloradonoprofits.org>)

### Employment Outlook

*Occupational Outlook Quarterly* (CS, DM)

*Job Rated Almanac* (DM)

*CAM report* (CS)

*Employment Outlook for Colorado* (DM)

### Internships

Internships are placements with employers that give Regis College students with a GPA of 2.5 or better the opportunity to combine coursework with real-life experience while earning academic credit. Internships enhance academic knowledge, personal development and professional preparation. In addition, a successful internship can give students an edge when hiring decisions are made because employers seek applicants with practical experience in their field. Students interested in an internship need to register with the **Academic Internship Program** for help with determining a site placement, learning objectives and academic criteria.

### Graduate School Information

*Real Guide to Grad School* (CS, DM)

*Peterson's Graduate and Professional Programs* (CS, DM and <http://www.petersons.com>)

*Gorman Report* (CS)

*Graduate School Admissions Advisor* (CS)

*Getting what you came for* (CS)

*Educational Rankings Annual* (DM)

*College Blue Book* (DM)

*Directory of Post-Secondary Institutions* (DM)

### Salary Information

*Colorado Occupational Wages*  
(<http://www.coworkforce.com/lmi/wages/wages.asp>)

*Compensation & Working Conditions* (DM)

*NACE Salary Survey* (CS)

Salary.com - <http://Salary.com>

### Alumni Career Network

One of the best resources for career information is people who work in the field you are considering. Contact information for Regis Alumni who have agreed to talk with students investigating career fields is available on the Alumni Career Network, a program located under "Alumni" at <http://www.ecampusrecruiter.com/regis>

### World Wide Web Sites

Regis Career Services: <http://www.regis.edu/careerservices>

Dayton Memorial Library article and research database:

<http://www.regis.edu/libdatabase.asp?sctn=lib&p1=empty>

JobWeb (NACE): <http://www.jobweb.org>

Career Magazine: <http://www.careermag.com>

America's Job Bank: <http://www.ajb.dni.us>