MATHEMATICS

Using information from the University of Maryland graduation survey, we have compiled information about Mathematics majors, such as where they work or go to graduate school post-graduation. Check out the topics below to learn more about planning for your career! For more information, follow the link to the University Career Center at CMNS (UCC@CMNS): go.umd.edu/uccatcmns

Industries and Career Paths

Mathematics majors are employed by governmental, industrial and academic organizations and in non-academic settings. According to 101 Careers in Mathematics, a book published by the Mathematical Association of America, there is a "multitude of careers" that math majors can apply for beyond the traditional academic position.

Organizations

The following list showcases employers of UMD mathematics undergraduates:

- National Aeronautics & Space Administration (NASA)
- Google
- US Air Force
- Northrop Grumman
- RTI International
- General Dynamics
- Baltimore Orioles
- Microsoft
- Aerotek
- Goldman Sachs
- Willis Towers Watson
- U.S. Navy
- Math for America
- Capital One
- Food & Drug Administration (FDA)
- National Institute of Standards & Technology (NIST)
- GEICO
- Five Rings Capital

Job Titles

The sample job titles below exemplify positions Mathematics majors are qualified for upon graduation. This is not an exhaustive list, but a starting point for exploration.

- Actuarial Analyst
- Software Engineer
- Cyber Software Engineer
- Business Analyst
- Technical Consultant
- Research Analyst
- Technology Analyst
- Data Analytics Associates
- Product Specialist
- IT Assurance and Risk Advisory Analyst
- Consultant
- Quantitative Analyst
- Data Scientist
- Financial Analyst
- Data Analyst
- Investment Specialist
Graduate Schools

The following is a list of schools where graduates are pursuing graduate degrees:

- Boston University
- Columbia University
- Cornell University
- Georgetown University
- Georgia Institute of Technology
- Harvard University
- Johns Hopkins University
- Massachusetts Institute of Technology
- Princeton University
- Stanford University
- University of California, Berkeley
- University of California, San Diego
- University of Chicago
- University of Maryland
- University of Michigan
- University of North Carolina, Chapel Hill
- University of Rochester
- University of Texas, Austin
- University of Wisconsin
- Yale University

Skills Developed as a Mathematics Major

The University of Maryland will prepare each student with many different skills to take into the workplace. These skills will come from academic coursework as well as experiential learning experiences students can choose to participate in while a student. For insight into what employers are looking for, review the skills inventory list (go.umd.edu/skillslist) to examine ways to include technical and cross-disciplinary skills on a resume, in interviews and on LinkedIn. The following link highlights “must have” career readiness competencies, according to employers: (go.umd.edu/fourcompetencies).

O*NET Online, sponsored by the U.S. Department of Labor lists the following skills that mathematicians should develop to be successful:

1. Mathematics- Using mathematics to solve problems.
2. Complex Problem Solving- Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
3. Critical Thinking- Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
4. Reading Comprehension- Understanding written sentences and paragraphs in work related documents.
5. Active Learning- Understanding the implications of new information for both current and future problem-solving and decision-making.

Math Major Resources

The following resources will help you explore relevant career paths:

- Mathematical Association of America: https://www.maa.org/careers/career-profiles
- Department of Mathematics: https://www-math.umd.edu/undergraduate/where-did-they-go.html
- Vault- Employer/Industry insights, rankings and reviews: www.vault.com
  - https://access.vault.com/recordurl?nid=9781438191447gpv&wid=256769&vid=1