MATHEMATICS



Mathematics is used directly or indirectly in many sectors of work.

A bachelor's degree in mathematics can be used in almost every sector of the world so you should consider if you want to use math skills directly or indirectly in the workplace. This may determine the types of experiences and further education necessary to prepare for your area of interest.

People with math backgrounds may work in jobs with titles such as actuary, analyst, research associate, technical consultant, computer scientist, or systems engineer, to name a few. You will develop many transferable skills such as critical thinking, problem diagnosis and solving, computer skills, and quantitative skills. Other important skills to develop include good reasoning, persistence, and communication, both verbal and written. Seek relevant experiences through internships or part-time jobs and supplement curriculum with courses in business, economics, computers, or statistics for increased opportunities.

Research the Professional Science Master's degree as an option to earn an interdisciplinary graduate degree and prepare for a job in industry. Join relevant organizations and seek leadership roles to learn to work well in a team environment. Make sure to conduct informational interviews with professionals in areas of interest to enhance knowledge, make contacts, and stay informed of new developments and current trends in the field.

AREAS OF OPPORTUNITY

- Research
- Mathematical Specialties
- Higher Education
 Administration
- Programming Systems
- Development
- Purchasing
- Actuarial Science
- Risk Management and Assessment
- Loss Management/Control
- Underwriting
- Buying
- Engineering
- Finance

State Government Agencies **Federal Government** Public and Private K-12 Schools Universities and Colleges Scientific Research and Development Services **Consulting Firms Computer Service Companies** Software Publishers **Electronics and Computer Manufacturers Engineering Firms** Insurance Companies **Financial Services Firms** Chemical and Pharmaceutical Companies Aerospace and Transportation Equipment **Product Manufacturers** Airlines and Airports **Communications Firms Energy Companies and Petroleum Producers** International Government Agencies Nonprofit Organizations

COMMON EMPLOYERS





PROFESSIONAL ORGANIZATIONS

- AMS American Mathematical Society
- MAA Mathematical Association of America
- NCTM National Council of Teachers in Mathematics
- SIAM Society for Industrial and Applied Mathematics

STRATEGIES ON ENTERING THE FIELD

- To work in applied mathematics, consider earning a double major in a scientific or technical area. Many students with a bachelor's or master's degree in math work in related fields such as computer science, engineering, science, or economics.
- Maintain a high grade point average and secure strong faculty recommendations to gain graduate school admittance.
- Research government hiring processes and internship opportunities if the public sector appeals to you.
- Develop excellent communication skills, verbal and written.
- Gain experience working with age group of interest through volunteering and tutoring.
- Acquire appropriate state teacher certification for K-12 teaching opportunities. Math majors may be eligible for alternative certification programs in certain public school systems.
- Gain experience through part-time, summer, or internship positions in a financial services firm.
- Develop strong interpersonal, teamwork, and communication skills in to work well with a diverse clientele.