WHAT CAN I DO WITH A MAJOR IN ... MATHEMATICS & STATISTICS

OCCUPATIONAL OVERVIEW AND EMPLOYMENT REQUIREMENTS:
Many mathematics graduates go to work in government or industry, and often pursue graduate school and teaching. The UNM Mathematics and Statistics Department (2013), states that many of their students are hired to do applied mathematics. Graduates working in applied mathematics can be found working in engineering, computer science or actuarial science. According to UNM’s Mathematics and Statistics Department (2013), “Companies hire mathematicians as well as particular types of scientists because both groups have something important to contribute. Typically, companies will have people of various backgrounds (engineers, mathematicians, computer scientists, etc.) grouped together to work on pertinent problems.”

A bachelor's degree is the minimum formal education required and is excellent preparation for occupations that require excellent mathematical competence and perspective. Some industries require a graduate degree for entry into the profession. Consult O*Net for more information on the specific KSAs (Knowledge, Skill, Ability) that are required for this career.

THE UNIVERSITY OF NEW MEXICO:
The Department of Mathematics and Statistics offers undergraduate students Bachelor of Science programs with concentrations in Applied Mathematics, Pure Mathematics, Computation Mathematics, Mathematics Education, and Statistics. Graduate level programs lead to a Master's or Doctorate degree with options in Pure Mathematics, Applied Mathematics, and Applied Statistics. You can find further information on the UNM Department of Mathematics and Statistics’ website.

INDUSTRIES & TARGET EMPLOYERS:
A variety of employers specifically recruit UNM students and alumni. Consult UNM’s Lobo Career Connection for a complete list of employers and current job postings. Speak with a Career Development Facilitator at the UNM Office of Career Services for help with identifying employers or additional resources for your occupation of choice.

Here are some common industries that hire Mathematic graduates:

**Education:** Colleges and universities - Private schools - Public schools

**Banking:** Commercial banks - Credit unions - Regional banks - Savings and loan associations

**Securities:** National and regional brokerage firms – Discount brokerage houses – Commercial banks – Financial organizations

**Insurance:** Insurance companies

**Computers:** Computer hardware & software firms – Service companies – Manufacturing firms – Federal, state, and local government – Financial Institutions – Consulting firms – Educational publishers – Specialized training organizations

**Market Research:** Consumer goods manufacturing firms - Market research firms

**Government:** Federal agencies including Defense, Labor, Justice, Agriculture, Health and Human Services, Transportation, Commerce, Treasury, NASA, and Library of Congress State agencies involving research and problem-solving teams

**Industry:** Consulting firms - Manufacturing, Transportation, Aerospace, Machinery, Electrical, Pharmaceuticals industries
According to the UNM Department of Mathematics and Statistics' website, the following organizations express an interest in hiring mathematics students:


SUGGESTED STRATEGIES:

- Consider specializing your skill set through a double major or minor in another area.
- Gain professional experience in your area of interest through involvement in internships, student employment, Co-ops, and/or volunteer opportunities.
- Shadow professionals in your field of interest to gain a better understanding of their occupation and to build relationships with professional mentors.
- Build your network and get involved on campus through student organizations and campus events. One related student organization is UNM Math Club. Find more organizations and events at the Student Activities Center website.
- Attend career-related campus events such as career fairs, company information sessions, and/or career workshops.
- Students who are interested in graduate school should maintain a high undergraduate GPA and develop relationships with faculty and community leaders.
- Speak with mentors and faculty about career opportunities.
- Job leads can be found on your department’s website, list-serv, newsletters, and social media pages.

STATE AND NATIONAL WAGES:
Adapted from CareerOneStop (2013)

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<th>MATHEMATICIAN</th>
<th>2012</th>
<th>10%</th>
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INFORMATIONAL WEBSITES:
American Mathematical Association  
American Statistical Association  
Association for Women in Mathematics  
Mathematical Association of America  
Society of Actuaries  
Society for Industrial and Applied Mathematics  
UNM Department of Mathematics & Statistics  

http://www.ams.org/  
http://www.amstat.org/  
http://www.awm-math.org/  
http://www.maa.org/  
http://www.soa.org/  
http://www.siam.org  
http://www.math.unm.edu/math/math_related.html
REFERENCES
University of New Mexico, Department of Mathematics & Statistics (2013). http://www.math.unm.edu/math/math_related.html
