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

OCCUPATIONAL OVERVIEW:

Conduct research in fundamental mathematics or in application of mathematical techniques to science, management, and other fields. Solve or direct solutions to problems in various fields by mathematical methods.

EMPLOYMENT REQUIREMENTS:

[Extensive Job Preparation Needed]

A bachelor's degree is the minimum formal education required. However, many employers also require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree).

EMPLOYERS & SUGGESTED STRATEGY:

Please ask your Career Advisor (CDF) for identifying employers or additional resources for your occupation of choice.

Industry: Consulting firms - Manufacturing, Transportation, Aerospace, Machinery, Electrical, Pharmaceuticals industries

Suggested Strategy: Note that greatest demand is for applied mathematicians with skills in computer science, electronics design and theory, statistics and probability. Develop computer and research skills. Learn to use relevant software packages. Earn a master's degree in math, business, or related field for advanced positions or for consulting jobs. Maintain excellent GPA for graduate/professional school admission. Gain relevant experience through internships, volunteering, summer, or part-time jobs.

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

Suggested Strategy: Become familiar with government hiring procedures. Make contacts through involvement in campus, local, or state politics. Obtain internship with local, state, or federal government. Join related professional organizations.

Market Research: Consumer goods manufacturing firms - Market research firms

Suggested Strategy: Acquire a business minor. Develop good oral and written communication skills. Volunteer to assist a professor with research. Become a student member of the American Marketing Association. Assist with canvassing/phone interviewing for charities or political campaigns. Complete a market research internship.

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

Suggested Strategy: Develop advanced computer skills, computer languages and programming, gain relevant experience through internships. Obtain experience with public speaking/teaching and develop training skills. Master technical writing skills.

Insurance: Insurance companies

Suggested Strategy: Develop strong computer skills. Minor in business. Hold a treasurer office position of an organization. Obtain experience in fundraising drives. Join a related professional association. Be familiar with exams and/or certifications required for actuarial, underwriting, claims, risk management, or sales positions.

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

Suggested Strategy: Acquire a business minor and eventually an MBA. Gain relevant experience through internship. Join finance-related student organization. Be geographically flexible when job-searching.

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

Suggested Strategy: Obtain a business minor. Complete an internship in a financial institution. Develop excellent computer skills. Demonstrate attention to detail. Become the financial officer or treasurer of a campus organization.

Education: Colleges and universities - Private schools - Public schools

Suggested Strategy: Obtain appropriate state licensure and/or certification for public school teaching positions. Volunteer to teach, supervise, or tutor with organizations such as Big Brother/Sister, YMCA, or churches. Develop excellent written and oral communication skills. Acquire a master's degree or Ph.D. for teaching positions at the college or university level.

NATIONAL WAGES (2006) FOR MATHEMATICIANS:

	10 %	25 %	Median	75 %	90 %
United States	\$ 43,500	\$ 63,000	\$ 86,900	\$ 106,200	\$ 132,200

STATE & NATIONAL WAGES (2006) FOR STATISTICIANS:

	10 %	25 %	Median	75 %	90 %
New Mexico	\$ 25,200	\$ 32,300	\$ 52,500	\$ 83,400	\$ 108,200
United States	\$ 37,000	\$ 48,500	\$ 65,700	\$ 87,800	\$ 108,600

STATE & NATIONAL WAGES (2006) FOR ACTUARIES:

	10 %	25 %	Median	75 %	90 %
New Mexico	\$ 63,200	\$ 83,300	\$ 116,300	\$ 135,700	\$ 145,600+
United States	\$ 46,500	\$ 58,700	\$ 82,800	\$ 114,600	\$ 145,600+

INFORMATIONAL WEBSITES:

UNM Department of Mathematics & Statistics

http://www.math.unm.edu/math/math_related.html
OTHER INFORMATIONAL WEBSITES:

<http://online.onetcenter.org>

<http://www.bls.gov/oco/>