# **MATHEMATICS**

What can I do with this major?

AREAS	EMPLOYERS	STRATEGIES
INDUSTRY Research Development Design Data Processing Testing Operations Quality Control Statistical Processing Control Environmental Analysis Consulting	Industries including:     Manufacturing     Transportation     Aerospace     Communications     Machinery     Electrical equipment     Pharmaceuticals     Other private industries Consulting firms	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 G.P.A. for graduate/professional school admission.  Gain relevant experience through internships, volunteering, summer, or part-time jobs.  Develop good oral and written communication skills.  Learn to work well in teams.
GOVERNMENT Research Administration	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	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.  Maintain a high grade point average.
MARKETRESEARCH		

Data Collection
Information Analysis

Market research firms
Consumer goods manufacturing firms

Develop good oral and written communication skills. Acquire a business minor.

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.

## **AREAS**

## **EMPLOYERS**

### **STRATEGIES**

#### **COMPUTERS**

**Programming** Systems **Applications** Systems Analysis **Data Processing** Information Systems Software Development Networking Hardware

Computer hardware and software firms Service companies Manufacturing firms Government (federal, state, and local) Financial institutions Wholesale and retail trade firms Custom software builders Service companies Specialized training organizations

**Educational publishers Consulting firms** 

Develop advanced computer skills.

Gain knowledge of computer languages and programming.

Take classes and earn relevant certifications.

Gain relevant experience through internships, parttime, or summer jobs.

Learn effective listening and verbal communication skills. Stay abreast of the latest developments in computer

technology.

Develop good interpersonal and communication skills. Obtain experience with public speaking/teaching and learn to develop curriculums for training positions.

Master technical writing skills.

Some areas may require a graduate degree.

#### **INSURANCE**

**Training** 

Actuarial Underwriting Claims Risk Management Sales

Insurance firms

Develop strong computer skills. Acquire a business minor or take supplemental courses in business or statistics. Become the treasurer of an organization. Obtain experience in fundraising drives. Join a related professional association. Gain relevant experience through internships. Become familiar with exams and/or certifications

required for actuarial positions.

### **SECURITIES**

Sales Research Operations

National and regional brokerage firms Discount brokerage houses Commercial banks Financial organizations

Obtain a business minor or supplement curriculum with courses in finance and/or economics.

Plan on acquiring an MBA.

Gain relevant experience through part-time or summer sales positions. Complete an internship with a related organization.

Join finance-related student organizations. Be geographically flexible when job searching.

## **AREAS**

## **EMPLOYERS**

### **STRATEGIES**

#### **BANKING**

Branch Management Credit Lending Operations Systems Trusts Commercial banks
Regional banks

Savings and loan associations

**Credit unions** 

Complete an internship in a financial institution.

Develop good interpersonal skills.

Obtain a business minor.

Develop excellent computer skills.

Demonstrate attention to detail.

Become the financial officer or treasurer of a campus organization.

#### **EDUCATION**

Public schools
Private schools
Colleges and universities

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.

#### **GENERAL INFORMATION**

- Math majors develop transferable skills including critical thinking, problem diagnosis and solving, computer skills, and quantitative skills.
- A bachelor's degree is often sufficient for entry-level positions, but an advanced degree may open the door to more upper-level opportunities. Pair a strong background in mathematics with another technical discipline such as computer science or engineering.
- Gain experience through volunteering, internships, and part-time or summer jobs.
- Develop competencies in a specific area of interest.
- Supplement curriculum with courses in business, economics, computers, or statistics for increased job opportunities.
- Maintain a high grade point average. Demonstrate attention to detail and commitment to accuracy.
- Build relationships with faculty for career information, contacts, and letters of recommendation.
- Join related student professional associations and seek leadership positions.
- Develop the ability to work well in teams.
- Conduct informational interviews with professionals in areas of interest to enhance knowledge and make contacts.
- Stay informed of new developments and current trends in the field.