

CAREER DEVELOPMENT OFFICE

Xavier University 530 Conaton Learning Commons 3800 Victory Parkway Cincinnati OH 45207-1161

CAREER OPPORTUNITIES FOR MATH MAJORS

SKILLS & ABILITIES OF THE MATH MAJOR

Computation

- Develop and write research proposals
- Review scientific literature
- Summarize research findings
- Preparing technical reports

Investigation

- Define a research problem
- Develop a research model
- Establish hypotheses
- Evaluate ideas
- Gather/analyze data
- Understand relationships among factors
- Draw meaningful conclusions

Utilize logical processes

Technical

- Use mathematical instruments
- Establish and control hypothetical designs
- Observe data/things
- Design and utilze computer simulations

Communications

- Develop and write research proposals
- Review scientific literature
- Summarize research findings
- Prepare technical reports

POTENTIAL CAREERS

Business and Industry

- Sales, technical equipment
- Metallurgical and Materials Engineer*
- Energy Engineer*
- Financial Analyst
- Marketing Researcher
- Actuary
- Risk Manager
- Underwriter

Computers

- Technical Writer
- Computer Engineer*
- Computer Programmer
- System Support Representative
- Information Specialist
- Computer Systems Analyst
- Operations/Systems Researcher

Research and Technical

- Aerospace Engineer*
- Artificial Intelligence Engineer*
- Research Scientist
- Physicist*
- Electrical Engineer*
- Mathematical Technician

Education and Government

- Professor*
- Mathematician
- Nuclear Engineer*
- Special Librarian*
- Planetary Scientist
- Teacher
- Demographer
- Economist

^{*} Additional graduate study is generally expected for those occupations marked with an * on the above list.

TYPES OF EMPLOYERS

- Businesses and Corporations
- State and Federal Government
- Self-Employed
- Schools
- Colleges and Universities
- Non-Profit Organizations

TOP OCCUPATIONS

Top and mid-level managers, executives, administrators

Actuaries

Computer systems analysts

Computer programmers

Computer engineers

Other management-related occupations

Insurance, securities, real estate, business services

3.9%Transportation and Logistics

RESOURCES AND WEBSITES FOR THE MATH MAJOR

The American Mathematical Society- http://www.ams.org/

Mathematical Association of America-http://www.maa.org/

The Society of Industrial and Applied Math-http://siam.org/

The Association for Women in Mathematics-https://sites.google.com/site/awmmath/home

The American Statistical Association-http://www.amstat.org/

O*Net-https://www.onetonline.org/

https://www.onetonline.org/Sources: The College Majors Handbook (Fogg, Harrington, & Harrington, 2012), University of Kansas University Career Center, University of Houston