

Mathematics

Typical Career Fields:

Mathematics/Specialties (projected growth 3 – 7%)

- Research
- Specialties

Education (projected growth 8 – 14%)

- Teaching
- Research
- Administration

Banking & Finance (projected growth 8 – 14%) 🌟

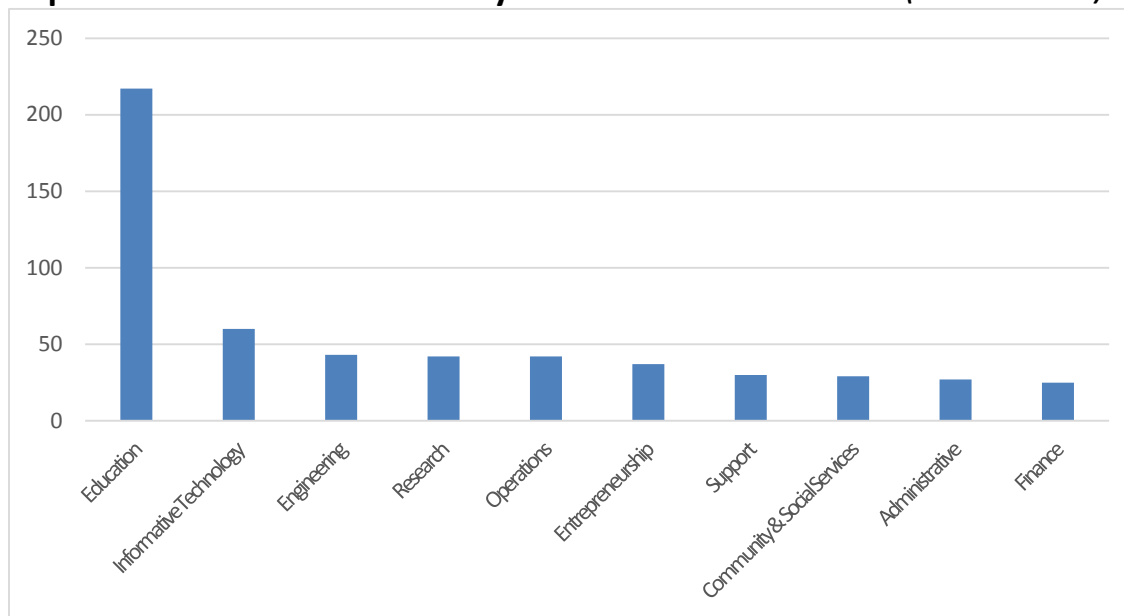
- Corporate/Consumer Credit Analysis
- Commercial Lending
- Trust Management



= Bright Outlook

Source: O*NET

Top Ten Career Fields Chosen by ESU Mathematics Grads: (Source: LinkedIn)



Where Our Grads Go (top ten)

- Shawnee Mission School District
- University of Kansas
- Winfield USD 465
- Cargill
- IBM
- Blue Cross & Blue Shield of Kansas
- Honeywell FM&T
- Hewlett Packard
- Sprint
- Cerner Corporation

View a list of required courses for this major at <http://www.emporia.edu/sac/list-of-majors.html>.

Career Services

career@emporia.edu

620-341-5407

www.emporia.edu/careerservices

Mathematics Majors

Strategies on how to become more marketable at graduation

Mathematics/Specialties - (Research, Specialties)

- **Definition of specialties** includes: Modeling and Simulation, Numerical Methods and Analysis, Statistics and Probability, Engineering Analysis, Differential Equations, Operations Research, Discrete Mathematics)
- Plan to earn a doctoral degree to work as a “mathematician.”
- 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.
- Some entry-level jobs in industry and government may be available at the bachelor’s level.
- Develop substantial knowledge of computer programming and software administration. Seek experience with relevant software packages.
- Gain experience in an area of interest through internships or research programs such as those sponsored by the National Science Foundation.
- Maintain a high grade point average and secure strong faculty recommendations to gain graduate school admittance.

Education (Teaching, Research, Administration)

- 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.
- Some private schools may hire candidates with degrees in mathematics who don’t hold certification.
- Earn a doctoral degree in math to teach at four-year institutions. A master’s degree may be sufficient for two-year colleges.
- Maintain a high grade point average and secure strong faculty recommendations to prepare for graduate school. Assist a professor with research.
- Seek appropriate graduate degree to enter higher education administration. Gain experience on campus in student leadership roles such as Resident Assistant or Orientation Leader.

Banking and Finance (Corporate and Consumer Credit Analysis, Commercial Lending, Trust Mgt.)

- Double major or minor in business to build a solid background in marketing, finance, and accounting.
- Gain experience through part-time, summer or internship positions in a financial services firm.
- Develop strong interpersonal and communication skills in order to work well with a diverse clientele.
- Serve as the financial officer or treasurer of a student organization.
- Plan to earn an MBA to enter investment banking.
- Be geographically flexible when job searching.

General Strategies

- Math can be found in almost every sector of the world of work. Students majoring in math should consider if they want to use math skills directly or indirectly in the work place. This may determine the types of experiences and further education necessary to prepare for area of interest.
- People with math backgrounds may work in jobs with titles such as: analyst, research associate, technical consultant, computer scientist, or systems engineer to name a few.
- Math majors develop many transferable skills including 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.