Bachelor of Science or Bachelor of Arts

Mathematics

College of Arts and Sciences

The mathematics major introduces students to the areas of real and complex analysis, number theory, abstract algebra, logic, and other fields. Mathematical models are used in such diverse areas as determining the shape of aircraft's wings for maximum lift, analyzing disease spread and control, and simulating network flows for efficient transportation systems. Mathematics also requires imagination, necessitating abstract and formalized thought on the one hand and creativity and intuition on the other. All people, in every trade and profession, use mathematics in their personal and professional lives Mathematics study can be designed to support different career goals, such as employment in business and industry, pre-professional education, or preparation for graduate school.ⁱ

Career Areas/Job Titles:

Management and Industry

- Manager Lawyer Accountant Finance Specialist Market Researcher Risk Management Specialist Business Intelligence Consultant Actuary Science and Technology
- Researcher Engineer Computer Programmer Web Administrator Systems Developer Software Developer Technical Support Specialist Physical Scientist Education K-12 Teacher Professor
- Administrator SAT/ACT Research and Design Government/Politics
- Statistician Cryptographer Resource Management Specialist

*Some careers may require licensure, certification, or further education. Talk to an advisor about specific requirements.

Transferable Skills:

- Basic Computer Skills Computer Troubleshooting Engineering Fundamentals Mathematics Expressing Ideas Persuasion Effective Use of Technology Written Communication Teaching/Instructing Others Teamwork Conceptualizing
- Defining Needs Developing Evaluation Strategies Forecasting/Predicting Gathering Information Identifying Problems Research Skills Setting Goals Attention to Detail Judgment & Decision Making Organization Skills
- Planning Prioritizing Tasks Strategic Planning/Visioning Creating Innovative Solutions Multi-tasking Quantitative Reasoning Data Analysis Analytical/Critical Thinking Problem Solving

*This is not an extensive list of transferable skills. See larger list of skills you might develop here:

http://ccss.osu.edu

Professional Links:

Society for Industrial and Applied Mathematics: <u>http://www.siam.org/</u> American Mathematical Society: <u>http://www.ams.org/home/page</u> National Council of Teachers of Mathematics: <u>http://www.nctm.org/</u> OSU Department of Mathematics: <u>http://www.math.osu.edu/ugadvising/careers</u>

