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.

**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

**Government/Politics**
- Administrator
- SAT/ACT Research and Design

**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

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

**Professional Links:**

- OSU Department of Mathematics: [http://www.math.osu.edu/ugadvising/careers](http://www.math.osu.edu/ugadvising/careers)