

Bachelor of Arts

BA with a Mathematics Major

Why study Math at CMU?

Mathematics is the language of our technological world. It lies at the heart of scientific research, engineering, and computer science. A math degree can prepare students for careers such as science, business, and teaching. The study of mathematics will also assist students in developing skills beneficial for studies in other disciplinary fields, since students learn to be precise and organized, solve problems creatively, and reason analytically.

At CMU, a Christian worldview provides perspective on mathematical studies, and students are invited to bring their own convictions and beliefs to their studies. We consider limitations and ethical applications of mathematics, how math can inspire awe of creation, and how math has shaped worldviews.

Program Strengths

CMU has an academically rigorous program, where the smaller program means students have access to their professors, and additional supports to achieve academic success. Small class-sizes allow for exemplary teaching and mentoring, where professors know your name and interests and support your academic and professional goals.

The interdisciplinary approach of CMU's math program provides students with the skills to think, speak, and write creatively about the intersections between math and other disciplines. This provides students with the skills to integrate their knowledge, beliefs, and actions, which will contribute to finding meaningful employment.

Career Paths

- Research analyst
- Mathematician
- Demographer
- Statistician
- Risk analyst
- Teacher
- Technical writer
- Business analyst
- Actuary
- Data analyst
- Public policy analyst
- Architect
- Applications programmer
- Computer consultant
- Cost estimator/analyst
- Economist
- Engineer
- Market researcher

Skills Developed

- Develop research models
- Establish hypotheses
- Gather and analyze data
- Evaluate ideas
- See relationships among factors
- Think critically, logically, and with reason
- Prepare technical reports
- Analyze probabilities
- Communicate complex ideas effectively
- Make decisions
- Organize systems
- Manage time
- Connect ideas between disciplines

Mathematics Programs

CMU offers the following programs in Mathematics including:

- Major in Mathematics within the three-year Bachelor of Arts
- Major in Mathematics within the four-year Bachelor of Arts
- Minor in Mathematics within the Bachelor of Arts

CMU Courses in the Math Program

- Basic Statistical Analysis
- Introduction to Calculus
- Discrete Mathematics
- Vector Geometry and Linear Algebra
- Electromagnetic Field Theory
- Intermediate Calculus – Multivariable
- Intermediate Calculus – Sequences and Series
- Ordinary Differential Equations
- Linear Algebra
- Philosophy of Mathematics
- Quantitative Methods in Business and Organizational Administration
- Introductory Logic
- Chaos Theory

Course descriptions can be found on the CMU website. Contact the admissions department with further questions.

In addition to specific Math courses, students will take courses in the humanities, sciences, social sciences, and Biblical and Theological Studies as part of their degree.

A work-integrated learning course is required in every degree at CMU. This practicum can be done as an intensive 12-week placement or a once-a-week placement over 20 weeks during the school year. The work placement can help students explore the field they are majoring in for career possibilities or it can provide a way to expand their experiences in a field they haven't thought about before.