



The **Master of Arts** in

Mathematics

Mathematics knows no boundaries. Neither should you.

Mathematics lays the foundation for complex thinking skills and teaches multiple problem-solving abilities. Which may be why the American mathematician William Paul Thurston said “Mathematics is not about numbers, equations, computations or algorithms: it is about understanding.” The Master of Arts in Mathematics degree program at the University of Missouri–St. Louis helps students of all backgrounds with a love for mathematics develop that greater understanding.

Master of Arts in Mathematics

The MA in Mathematics program at UMSL offers students the option of focusing on either applied math for those interested in non-teaching careers, or pure math for those seeking teaching careers. Graduates of the program will be able to enhance their existing careers as high-school math teachers, teach mathematics at the college level, build a foundation for the continuation of their education in a PhD program, or work as applied mathematicians or statisticians in positions requiring strong quantitative skills. Students may enroll in the program on a part-time basis, but must have at least a bachelor’s degree in mathematics or in a field with significant mathematical content.

The Master of Arts in Mathematics, Emphasis in Data Science

UMSL is the only public university in the St. Louis region that offers a graduate-level data science degree. By choosing the data science emphasis, students learn the mathematics and statistics needed for data analysis, data modeling and machine learning applications. They also learn to design and implement statistical models using either R or Python, and become proficient in applied statistics and data analysis. Upon graduation, they will be able to work with data, understand data, extract conclusions from data, as well as build computer-based statistical/machine learning models.

2+3 BA/MA Dual Degree Program

The MA in Mathematics is also offered in the 2+3 program format. This unique 2+3 dual degree program provides a pathway for students to earn both a bachelor’s and a master’s degree in mathematics with fewer total credit hours than would be required to complete each degree independently. Once all requirements have been met, students will be awarded both a BA and an MA, and are able to enter the job market with a competitive edge.

Transforming Lives

The Master of Arts in Mathematics at UMSL is earned through our College of Arts and Sciences, the academic core of the University of Missouri–St. Louis. Through academic programs offered on- and off-campus, traditional and nontraditional students gain knowledge, skills and intellectual leadership for a variety of career paths, advanced study and research in many academic disciplines.

Graduates are known for their professionalism on the job and their strong sense of civic responsibility. Students in our programs engage in creative and critical thinking, learn to analyze evidence, to appreciate patterns of complexity and to reflect on important issues that impact our daily lives. Students gain skill sets to prepare for a changing workplace that requires flexible, dynamic and well-educated employees.

The Department of Mathematics and Statistics conducts pivotal research in areas such as data science, computational mathematics, topology, probability and statistics. Many faculty members have received international recognition for contributions to their fields. The Math Academic Center provides free individual assistance to all students. The Math Technology Learning Center is a resource dedicated to our math students where they can access study space, do homework online, take advantage of various resource materials or get help from an instructor or student teacher.

Serious education. Serious value.

The Master of Arts in Mathematics is designed to provide specialized knowledge, skills and training in a flexible format, with classes available in-person, online and in a hybrid format. You'll learn from highly qualified educators and researchers who hold terminal degrees from some of the world's most prestigious academic institutions.

The University of Missouri–St. Louis provides the knowledge, resources, tools, skills and support students need to be successful in our programs. Our comprehensive student support services include workshops, tutoring and career services to help you develop skills and strategies to be successful in the classroom and beyond. We're also committed to increasing access to higher education, and as such, UMSL is consistently ranked number one in affordability in the St. Louis region.

Learn more at umsl.edu/mathstats

The University of Missouri–St. Louis is the largest public research university located in Missouri's most populous and economically important region. UMSL provides high-quality, affordable education to one of the most diverse student bodies in the state. No university is better connected to the surrounding region than UMSL. More than 75% of our graduates stay in St. Louis. The region needs a well-equipped workforce with strong communication skills, and UMSL is prepared to help you meet those needs. Choose the University of Missouri–St. Louis for mathematics.

Career Opportunities

Actuary
Applied Mathematician
Data Analyst
Data Modeling Specialist
Data Scientist
Financial Analyst
GIS Analyst
Market Research Analyst
Math Teacher
Mathematical Modeler
Operations Research Analyst
Quantitative Analyst
Statistician

College of Arts and Sciences

1 University Blvd.
303 Lucas Hall
St. Louis, MO 63121
314-516-5501

arts-science@umsl.edu
cas.umsl.edu

Department of Mathematics and Statistics

1 University Blvd.
311 Express Scripts Hall
St. Louis, MO 63121
314-516-6355

cmathstats@umsl.edu
umsl.edu/mpas/

Office of Graduate Admissions

1 University Blvd.
121 Woods Hall
St. Louis, MO 63121
314-516-5458

gradadm@umsl.edu
graduate.umsl.edu



CHOOSE UMSL