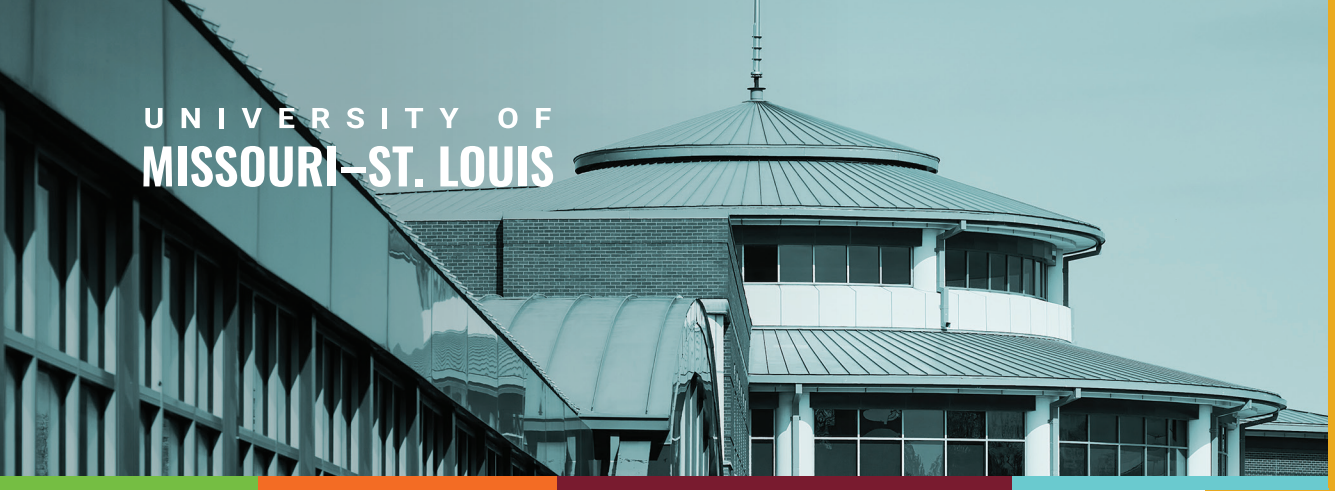

UNIVERSITY OF
MISSOURI–ST. LOUIS

4-YEAR
ACADEMIC
MAP

Mathematics BA

The Bachelor of Arts in Mathematics degree provides a well-rounded liberal education in addition to developing the analytic and technical skills necessary for graduate study, as well as other career opportunities. It is more flexible than the Bachelor of Science degree, so it may be a better option if you are interested in a double major with another program or wish to combine a mathematics degree with a minor. UMSL faculty in Mathematics and Statistics have created sequences of courses dedicated to helping you develop the skills applicable to the career path you choose.

Career Outlook

Mathematicians and statisticians solve real-world problems by applying mathematical and statistical models in industry, academia, and government. Careers in mathematics and statistics are consistently among the top-rated careers in terms of job satisfaction, and job prospects are projected to be very good over the next decade.

Our graduates have gone on to be educators, to work for governmental agencies like the NGA and NSA, to work in the insurance industry in companies like RGA, and to work at top local companies like Boeing, Ameren, Centene, and Anheuser-Busch.

Future Career Options

- Actuary
- Biomedical Researcher
- Business Analyst
- College Professor
- Cryptographer
- Data Analyst
- Data Scientist
- Financial Analyst
- Geospatial Analyst
- High School Teacher
- Industrial Mathematician
- Mathematical Consultant
- Mathematical Researcher
- Statistician

Skills Developed By Degree Completion

- Apply critical-thinking and problem-solving skills to real-world problems
- Analyze data to make well-informed decisions
- Apply mathematical or statistical models to make decision
- Clearly communicate technical ideas
- Read, understand, and assess the veracity of mathematical arguments and proofs

Successful alumni have gone on to fulfill many of the opportunities above. Additional possibilities are taken from the Bureau of Labor Statistics. Contact an advisor to discuss additional future career options.

UMSL | Arts and Sciences
University of Missouri–St. Louis

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2024-2025 4-YEAR ACADEMIC MAP

Bachelor of Arts in Mathematics

Check once completed

Year 1

FALL SEMESTER (15 credit hours)
- ENGL 1100: First-Year Writing (3)
- INTDSC 1003: University Studies (1)
- MATH 1800: Analytic Geometry and Calculus I (5)
- GEN ED EXPLORE: Humanities and Fine Arts (3)
- GEN ED EXPLORE: Social Sciences (3)

SPRING SEMESTER (17 credit hours)
- CMP SCI 1250: Introduction to Computing (3)
- MATH 1320: Introduction to Probability and Statistics (3)
- MATH 1900: Analytic Geometry and Calculus II (5)
- GEN ED CORE: US History and Government (3)
- GEN ED EXPLORE: Social Sciences (3)

Year 2

FALL SEMESTER (16 credit hours)
- FGN LANG 1001: Language and Culture I (5)
- MATH 2000: Analytic Geometry and Calculus III (5)
- MATH 3250: Foundations of Mathematics (3)
- GEN ED EXPLORE: Humanities and Fine Arts (3)

SPRING SEMESTER (14 credit hours)
- FGN LANG 1002: Language and Culture II (5)
- MATH 2020: Introduction to Differential Equations (3)
- MATH 2450: Elementary Linear Algebra (3)
- GEN ED EXPLORE: Social Sciences (3)

Year 3

FALL SEMESTER (15 credit hours)
- ENGL 3100: Junior-Level Writing (3)
- FGN LANG 2101: Language and Culture III (3)
- MATH 4400: Introduction to Abstract Algebra I (3)
- GEN ED CORE: Communication Proficiency (3)
- GEN ED EXPLORE: Humanities and Fine Arts (3)

SPRING SEMESTER (15 credit hours)
- MATH 4100: Real Analysis I (3)
- 2000-Level Related Area Requirement (3)
- Cultural Diversity (3)
- Elective or Minor (3)
- Elective or Minor (3)

Year 4

FALL SEMESTER (15 credit hours)
- MATH 4000-Level Course (3)
- 2000-Level Related Area Requirement (3)
- 2000-Level Elective (3)
- 2000-Level Elective (3)
- Elective or Minor (3)

SPRING SEMESTER (16 credit hours)
- MATH 4000-Level Course (3)
- 2000-Level Elective (3)
- Elective or Minor (3)
- Elective or Minor (3)
- Elective or Minor (1)

Last updated May 2024

IT STARTS RIGHT NOW

This is a sample academic map for the courses to take each academic semester/session. This map is not a substitute for academic advisement. Contact your advisor when making final selections.

UNIVERSITY STUDIES
University studies is required for all first-year students and those with less than 24 credit hours.

MILESTONE COURSES
Milestone courses should be taken in the order shown to ensure you stay on a timely and accurate path toward graduation.

SUMMER AND INTERSESSION COURSES
Don't forget that summers and winter breaks are a way to fast-track your route to degree completion – and lighten your load during fall and spring!

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