THE DEPARTMENT OF MATHEMATICS

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The mathematics major is designed to include students with a wide variety of goals and backgrounds. Mathematics is an excellent preparation for fields from technical to legal, from scientific to managerial, and from computational to philosophic. It is also a source of pleasure and satisfaction for people in every line of endeavor. Therefore, MSU Billings' programs are constructed to welcome interested students of all sorts. Our programs reflect the diversity of interests of our students and the increasingly diverse nature of the mathematical sciences.

Advising Information

Students are encouraged to meet with their advisor each semester to confirm that their plan of study is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner. Faculty advisors work with students to explore appropriate internships, cooperative education placements and/or experiential learning opportunities which will enhance the student's academic program. In addition, advisors provide assistance in selecting elective courses which support the student's interests, career plans and plan of study.

Academic advising services for all freshmen Liberal Arts and Social Sciences majors are provided through the Advising Center on McMullen Hall first floor west. Upon declaring a specific major, Liberal Arts and Social Science majors will be assigned to a faculty advisor in their department for upper-division advising. Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

Learning Outcomes for Math Department

1. Use mathematical concepts to solve problems.
2. Critique and construct mathematical arguments and proofs.
3. Use technology such as (but not limited to) computer algebra systems, statistical software, and calculators to solve, analyze, or explore problems in mathematics.

Code	Title	Credits
1.		
Geometry		
M 329	Modern Geometry	3
Algebra		
M 333	Linear Algebra	4
M 431	Abstract Algebra I	3
Calculus		
M 171	Calculus I	4
M 172	Calculus II	4
M 273	Multivariable Calculus	4
Mathematical analysis		
M 242	Methods of Proof	3
M 471	Mathematical Analysis	3
Probability and statistics		
STAT 216	Introduction to Statistics	4
STAT 341	Intro Probability & Statistics	4
Discrete mathematics		
M 305	Discrete Structures I	4
2.		
M 329	Modern Geometry	3
M 431	Abstract Algebra I	3
M 471	Mathematical Analysis	3
3.		
M 333	Linear Algebra	4
STAT 216	Introduction to Statistics	4
STAT 341	Intro Probability & Statistics	4

- Mathematics Bachelor of Science Degree (https://catalog.msubillings.edu/undergraduate/college-liberal-arts-social-sciences/department-mathematics/bs-mathematics/)
- Mathematics Teaching Licensure Option Single Subject Endorsement Bachelor of Science Degree (https://catalog.msubillings.edu/undergraduate/college-liberal-arts-social-sciences/department-mathematics/bs-mathematics-teaching-licensure-option-single-subject-endorsement/)

- Mathematics Teaching Minor (https://catalog.msubillings.edu/undergraduate/college-liberal-arts-social-sciences/department-mathematics/teaching-minor-mathematics/) ⌨ Offered Online
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