MATHEMATICAL SCIENCES

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Mathematics is studied both as a tool and for its own sake. Its usefulness for the sciences and in decision-making processes makes it an indispensable part of many curricula. Mathematics is challenging, fascinating, and beautiful; and it is also appreciated by many who seek primarily to use mathematics as a tool.

The Department of Mathematical Sciences provides students with the training in mathematics and statistics necessary for success in their careers. The instructional mission of the department has three components: we offer general education quantitative literacy courses; we provide the mathematical background for students preparing for careers in other fields; and we offer a quality program of mathematical specialization at all levels, ranging from an undergraduate minor to bachelors, masters, and doctoral degrees in a variety of fields, including teacher preparation.

Mathematics more and more becomes an integral part of high-tech industries; many technological, political, and social processes have become so complex that they could not be really understood without a mathematician's involvement. Our graduates are prepared for exciting and fulfilling careers in academia, industry, government, and other areas. In addition to educational activities, our faculty are committed to excellence both in research in the mathematical sciences and in service to the citizens of Montana and the wider community.

High School Preparation: For studying mathematics at the University level, it is recommended that the high school course work consist of four years of college-preparatory mathematics, including geometry, trigonometry, and college algebra or precalculus. A course in calculus or statistics is helpful, but not necessary. It is unusual to complete an undergraduate degree in mathematics in four years without the necessary background to take M 171 during the freshman year (preferably during the first semester at the university).

Baccalaureate Degrees

- Mathematics B.A. (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/ba-mathematics/)
- Mathematics B.A., Applied Mathematics Concentration (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/ba-applied-mathematics/)
- Mathematics B.A., Combinatorics and Optimization Concentration (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/ba-combinatorics-optimization/)
- Mathematics B.A., Mathematics Education Concentration (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/ba-mathematics-education/)
- Mathematics B.A., Pure Mathematics Concentration (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/ba-pure-mathematics/)
- Mathematics B.A., Statistics and Data Science Concentration (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/ba-statistics/)
- Mathematical Sciences-Computer Science B.S. (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/bs-mathematical-science-computer-science/)

Minors

- Mathematics Minor (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/minor-mathematics/)
- Mathematics Education Minor (http://catalog.umt.edu/colleges-schools-programs/humanities-sciences/mathematical-sciences/minor-mathematics-education/)