

# Mathematical Sciences Minors

## Interested in a MathSci Minor?

Mathematics, Actuarial Science, Atmospheric Science

Contact the Department of Mathematical Sciences:

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## Why a MathSci Minor?

Students of the sciences, engineering, computer science, economics, and business often complete a significant number of mathematical sciences credits. These students are encouraged to take a mathematics major or **minor**, which adds an official recognition of important analytical skills valued by employers and graduate schools.

## What is Mathematics?

**Mathematics** is the international language of science and technology. Much of the subject matter in engineering and the natural sciences, as well as some social sciences such as economics, is presented in mathematical terms. Mathematical and statistical techniques are vital in fields that usually are not considered mathematical, such as biology, psychology, and political science. Some students are attracted to mathematics for its own sake, for the beauty, discipline, logic, and problem-solving challenges. Other students pursue mathematics in order to achieve deeper understanding in their own areas of study.

## What is Actuarial Science?

**Actuarial Science** is the mathematical analysis of problems in economics, finance, and insurance. It requires knowledge of statistics, probability, and interest theory and how they relate to financial issues.

## What is Atmospheric Science?

**Atmospheric Science** is the study of short-term weather and long-term climate, involving both applied activities such as weather forecasting & analysis and fundamental research. It uses advanced methods in statistics & numerical modeling.



## For All L&S Minors

### For all minors in the College of Letters and Science:

Students must complete at least 9 upper-division (numbered 300 and above) credits for the minor in residence at UWM. The College requires that students attain at least a 2.500 GPA on all credits in the minor attempted at UWM. In addition, students must attain a 2.500 GPA on all minor credits attempted, including any transfer work.

## Mathematics Minor

Students minoring in mathematics must complete Math 231, 232, and 233 or an equivalent math sequence with a GPA of at least 2.500. They must take 12 credits in mathematical sciences (curricular areas Math and MthStat) courses numbered 300 and above. Math 234 may substitute for 3 of these 12 credits.

## Actuarial Science Minor

Admission to this minor requires a minimum GPA of 2.500 in Math 231, 232, and 233 (or equivalent course sequence). Students who have completed these courses with the required GPA may complete a formal declaration of minor at the department office. These three courses do not count in the minor GPA. The following courses are required: Math 234 & 311, and MthStat 361 & 362. In addition, one of the following, with a grade of B- or better in each course taken also is required: Bus Adm 450 or both Econ 301 & 302.

## Atmospheric Science Minor

The minor consists of a minimum of 18 credits in atmospheric science. Six of these credits must include Atm Sci 240 and 360. The remaining 12 Atm Sci credits must be at the 300 level or above.

Students interested in minoring in Mathematics, Actuarial Science or Atmospheric Science should see one of the Mathematical Sciences Department's undergraduate advisors during their walk-in hours, or by appointment. Stop by the main office on the 4th floor of the EMS building for more information, or see our webpage ([uwm.edu/math](http://uwm.edu/math))!

