

## Mathematics Minor

The minor in Mathematics is available for those students who want their formal college records to emphasize a serious amount of upper-division work in mathematics.

- Mathematics minor requires a minimum of six courses and 24 credits.
- A minimum of 16 credits must be taken outside the student's major requirement.
- Up to two courses may be transferred from other institutions.
- Completion of Mathematics minor requires a grade of C or higher in all required courses for the minor.

Students must complete 24 credits as follows:

**A. Required Mathematics Courses:** All of the following four courses (16 credits)

MA2310	Calculus & Analytic Geometry I	4
MA2320	Calculus & Analytic Geometry II	4
MA3030	Discrete Mathematics	4
MA3160	Linear Algebra	4

**B. Required Elective Courses:** Two courses from the following (8 credits)

MA3210	Intro. to Probability & Statistics	4
MA3330	Calculus and Analytic Geometry III	4
MA3520	Transition to Advanced Mathematics	4
MA4100	Number Theory	4
MA4510	Geometry	4
	Any 4000 or 5000 level Mathematics Course	4

## Applied Mathematics Minor

The minor in Applied Mathematics is designed for those students who want to strengthen their skills in essential areas of quantitative reasoning, critical thinking, and problem solving across a range of disciplines. This minor is especially relevant to students majoring in the natural or social sciences, or in the School of Business, who intend to pursue advanced study or careers in areas that require strong analytical skills. (Examples of such professional areas would include actuarial science, biostatistics, business administration, decision science, finance, management science, operations research, natural resources and sustainability.) Students will explore the use of mathematical models to analyze and solve real-life problems and systems. Applied mathematics provides valuable tools for improved decision making, and for enhanced understanding of uncertainty and complexity in the world.

- Applied Mathematics minor requires a minimum of six courses and 24 credits.
- A minimum of 16 credits must be taken outside the student's major requirement.
- Up to two courses may be transferred from other institutions.
- Completion of Applied Math minor requires a grade of C or higher in all required courses for the minor.

Students must complete 24 credits as follows:

**A. Required Mathematics Courses:** All of the following four courses (16 credits)

	MA2310	Calculus & Analytic Geometry I	4
1.	OR		
	MA2300	Calculus for Business & Economics	4
2.	MA3160	Linear Algebra	4
3.	MA3210	Intro. to Probability & Statistics	4
4.	MA4910	Operations Research I	4

**B. Required Elective Courses:** Two courses from the following (8 credits)

1.	MA2320	Calculus & Analytic Geometry II	4
2.	MA4300	Numerical Analysis	4
3.	MA4360	Differential Equations	4
4.	MA4920	Operations Research II	4
5.	MA5230	Mathematical Statistics	4