## MATHEMATICS, MINOR

This minor may only be completed by students admitted to Elementary Education options leading to certification in K-9 or Middle Childhood through Early Adolescence. A minor is not required to complete the K-9 certification program, but students may elect to complete one.

Minors provide a depth of study in a particular area of interest and also inform classroom instruction. The completion of a minor is required to teach middle school in some states and may benefit students particularly interested in teaching at this level.

The Department of Mathematics is housed in the College of Letters & Science. Students may wish to consult with an undergraduate advisor in the department to discuss course selection and other issues related to this field of study. The current list of advisors and the schedule of the office hours can be found at the departmental advising page (https://www.math.wisc.edu/undergraduate/advising/).

Upon completion, the subject area of the minor will be posted on the UW-Madison transcript. **Students will not receive an additional certification or license in the subject area as was possible prior to fall, 2022 program admission.** The Wisconsin Department of Public Instruction does not offer content licenses in association with the K-9 educator license.

## HOW TO GET IN

This minor may only be declared by students completing Elementary Education certification in either K-9 or Middle-Childhood-through-Early-Adolescence. The declaration form is located on the School of Education's Undergraduate Admissions page and can be submitted any time after admission into the program.

## REQUIREMENTS

Complete a minimum of 28 credits. A minimum cumulative grade point average of 2.75 is required, based on all UW–Madison coursework included in the minor.

Elementary Education students may also wish to consider the Specialized Mathematics minor, which exchanges some of the higher-level mathematics courses for a broader range of coursework in mathematics, computer sciences, and statistics. A mathematics/science dual minor option is also available.

The first 13 credits of the mathematics minor involves calculus-level coursework. Students may need to complete prerequisite coursework—e.g., MATH 112 Algebra, MATH 113 Trigonometry—to reach this proficiency level. These preparatory courses may be used to meet the liberal studies requirement, but may not be applied toward the credits required for the mathematics minor.

| Code     | Title                                     | Credits |
|----------|---|---------|
| MATH 221 | Calculus and Analytic Geometry 1          | 5       |
| MATH 222 | Calculus and Analytic Geometry 2          | 4       |
| MATH 234 | CalculusFunctions of Several<br>Variables | 4       |

| MATH 340 | Elementary Matrix and Linear<br>Algebra | 3 |
|----------|---|---|
| STAT 301 | Introduction to Statistical Methods     | 3 |
| MATH 441 | Introduction to Modern Algebra          | 3 |
| MATH 461 | College Geometry I                      | 3 |

Because of prerequisites and scheduling issues, the sequencing of this coursework requires careful planning to be completed in a timely fashion. Students are encouraged to consult with an advisor regarding the appropriate sequencing of these courses.