

MATHEMATICS EDUCATION MINOR

The Mathematics Education minor provides the necessary content knowledge for students seeking to teach Mathematics, Grades 4-12. Students will develop disciplinary knowledge in the core areas of Number & Quantity and Algebra, Function and Calculus, Geometry, and Statistics & Probability.

This minor is only available to Secondary Education Majors.

Program Learning Outcomes

1. WI Educator Preparation: Teacher Standard 4: Content Knowledge.
The teacher understands the central concepts, tools of inquiry, and structures of each discipline he or she teaches. The teacher creates learning experiences that make the discipline accessible and meaningful for pupils to assure mastery of the content.
2. NCTM Standard 1 (Knowing and Understanding Mathematics)
Candidates demonstrate and apply understandings of major mathematics concepts, procedures, knowledge, and applications within and among mathematical domains of Number; Algebra and Functions; Calculus; Statistics and Probability; Geometry, Trigonometry, and Measurement.
3. NCTM Standard 2 (Knowing and Using Mathematical Processes)
Candidates demonstrate, within or across mathematical domains, their knowledge of and ability to apply the mathematical processes of problem solving; reason and communicate mathematically; and engage in mathematical modeling. Candidates apply technology appropriately within these mathematical processes.

This minor is only available to secondary education majors.

Cumulative GPA of 3.0 or higher on a 4.0 scale in all required courses for the Mathematics minor.

Code	Title	Credits
Number and Quantity Algebra		
MATH 111	College Algebra I	5
MATH 114	College Algebra II/Trigonometry	5
Functions and Calculus		
MATH 221	Calculus and Analytic Geometry I	5
MATH 222	Calculus and Analytic Geometry II	5
Geometry		
MATH 361	Foundations of Geometry	3
Statistics and Probability		
MATH 309	Probability and Statistics (Same As CSCI 309)	3
Other Required Courses		
MATH 317	Differential Equations and their Applications	4
Select one course:		3-4
MATH 303	Set Theory, Logic and Proof	
MATH 367	Elementary Number Theory	
MATH 231	Discrete Mathematics (Same As CSCI 231)	
MATH 301	Linear Algebra	
Total Credits		33-34

University Requirements for Minors

Course work in the minor must be completed with the minimum GPA as specified by the department or program under which the minor falls, usually a 2.00 on a 4.00 scale, but higher in some programs. Transfer students must attain the minimum specified GPA on a combination of transfer credits accepted toward the minor and credits attempted at UW-Parkside.

At least half of the course work required for a minor must be completed at UW-Parkside.