

# MATHEMATICS, MINOR (SCIENCE)

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

## Program Requirements

Requirement	Credits
Requirements for the Minor	26-28

### Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10>). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Code	Title	Credits
<b>Prescribed Courses</b>		
<i>Prescribed Courses: Require a grade of C or better</i>		
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
<b>Additional Courses</b>		
<i>Additional Courses: Require a grade of C or better</i>		
Select 6-8 credits of the following:		6-8
MATH 220	Matrices	
MATH 230	Calculus and Vector Analysis	
MATH 231	Calculus of Several Variables	
MATH 232	Integral Vector Calculus	
MATH 250	Ordinary Differential Equations	
MATH 251	Ordinary and Partial Differential Equations	
MATH 310	Elementary Combinatorics	
MATH 311W	Concepts of Discrete Mathematics	
MATH 312	Concepts of Real Analysis	
<b>Supporting Courses and Related Areas</b>		
<i>Supporting Courses and Related Areas: Require a grade of C or better</i>		
Select 12 credits of 400-level MATH courses		12