

# 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.

**Spring 2026 Curricular Update:** *The program description, entrance requirements, and program requirements detailed on this page are effective beginning Spring 2026. To learn more about what approved curricular changes take effect in Spring 2026, please visit the Changes to the UG Bulletin page (<https://bulletins.psu.edu/undergraduate/general-information/using-this-bulletin/#changestotheugbulletintext>). To view the requirements in effect for Fall 2025, please visit the 2025-26 Undergraduate Bulletin PDF (<https://bulletins.psu.edu/pdf/undergraduate.pdf>).*

## 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/students/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/>).

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 <sup>1</sup>                    |   | 12      |

<sup>1</sup> No more than 3 credits of MATH 400 may be used for this requirement.