

MATHEMATICS MAJOR (B.S.)

<https://ceps.unh.edu/mathematics-statistics/mathematics-bs>

Description

This program offers the strongest concentration in mathematics, requiring courses that are intended to prepare the student for graduate work in mathematics. Through a judicious choice of electives, students may design stronger pre-graduate programs, a program in applied mathematics, or slant the program toward a career in business or industry.

Graduation Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

Requirements

Code	Title	Credits
Required MATH Courses		
MATH 425	Calculus I	4
MATH 426	Calculus II	4
MATH 445	Mathematics and Applications with MATLAB	4
or CS 410	Introduction to Scientific Programming	
MATH 527	Differential Equations with Linear Algebra ¹	4
MATH 528	Multidimensional Calculus ¹	4
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
MATH 545	Introduction to Linear Algebra ¹	4
or MATH 645	Linear Algebra for Applications	
MATH 761	Abstract Algebra	4
MATH 763	Abstract Algebra II	4
MATH 767	One-Dimensional Real Analysis	4
MATH 784	Topology	4
MATH 788	Complex Analysis	4
MATH Elective ²		4
Select two elective courses from the following:		
MATH 765	Introduction to Commutative Algebra and Algebraic Geometry	4
MATH 768	Real Analysis II	4
MATH 769	Introduction to Differential Geometry	4
MATH 770	Foundations of Number Theory	4
MATH 772	Combinatorics	4
Capstone		
MATH 797	Senior Seminar	2 -
or MATH 799	Senior Thesis	4
Other Required Courses		
PHYS 407	General Physics I	4

PHYS 408	General Physics II	4
Total Credits		74-76

- ¹ MATH 525 Linearity I *may be substituted for*: MATH 545 Introduction to Linear Algebra *or* MATH 645 Linear Algebra for Applications. MATH 525 Linearity I - MATH 526 Linearity II *may be substituted for*: MATH 527 Differential Equations with Linear Algebra, MATH 528 Multidimensional Calculus, *and* MATH 645 Linear Algebra for Applications.
- ² Students should work with their advisor to identify the MATH course that will be used to fulfill this elective requirement.