

APPLIED MATHEMATICS MAJOR: SOLID MECHANICS AND VIBRATIONS OPTION (B.S.)

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

Description

This degree program prepares students for employment and/or graduate study in a variety of fields and research specializations in which mathematics plays a critical role in the solution of important scientific and technological problems.

Requirements

Major Requirements

Code	Title	Credits
MATH 425	Calculus I	4
MATH 426	Calculus II	4
MATH 445	Mathematics and Applications with MATLAB	4
MATH 527	Differential Equations with Linear Algebra	4
MATH 528	Multidimensional Calculus	4
MATH 531	Mathematical Proof	4
MATH 539	Introduction to Statistical Analysis	4
MATH 545	Introduction to Linear Algebra	4
MATH 645	Linear Algebra for Applications	4
MATH 753	Introduction to Numerical Methods I	4
MATH 797	Senior Seminar ¹	4
PHYS 407	General Physics I	4
Select one of the following:		4
MATH 798	Senior Project ²	
MATH 799	Senior Thesis ²	
Total Credits		52

¹ These requirements can be satisfied by MATH 525 Linearity I-MATH 526 Linearity II.

² This course satisfies the capstone experience requirement for the Discovery Program.

Solid Mechanics and Vibrations Option Requirements

PHYS 408	General Physics II	4
MATH 647	Complex Analysis for Applications	4
MATH 745	Foundations of Applied Mathematics I	4
ME 525	Statics	3
ME 526	Mechanics of Materials	3
ME 561	Introduction to Materials Science	4
ME 627	Dynamics	3
Select TWO of the following:		8

ME 724	Vibration Theory and Applications	
ME 727	Advanced Mechanics of Solids	
ME 730	Mechanical Behavior of Materials	
ME 731	Fracture and Fatigue Engineering Material	
Total Credits		33