

Bachelor of Science in Applied Mathematics

The **BS in Applied Mathematics** combines the rigor of a BS degree with an emphasis on topics in applied mathematics. It also prepares students for graduate study in Applied Mathematics and is appropriate for students interested in interdisciplinary graduate training in the sciences and engineering.

Please note:

- All classes counting toward the degree must be taken for a letter grade.
- Students must meet the minimum GPA requirement of 2.0 to graduate with any major or minor from the department.
- Additionally, a letter grade of "D" in a prerequisite course indicates insufficient preparation for the follow up course and we recommend that you retake the course.
- Major/Minor GPA will be calculated using the better of the grades when a student repeats a course.

Class Number	Class Name
Math 111	Calculus I
Math 112	Calculus II
Math 211	Multivariable Calculus
Math 212	Differential Equations
Math 221 or Math 321	Linear Algebra or Vector Spaces
Math 250	Foundations of Mathematics
Math 315	Numerical Analysis
Math 351	Partial Differential Equations
CS 170	Introduction to Computer Science I
Any combination of 3 courses chosen	Math 318: Complex Variables
from the following list:	Math 344: Differential Geometry
	Math 345: Math Modeling
	Math 346: Linear Optimization
	Math 347: Intro to Nonlinear Optimization
	Math 352: PDEs in Action
	Math 361: Mathematical Stats I
	Math 362: Mathematical Stats II
	Math 411: Real Analysis I
	Math 412: Real Analysis II

Requirements

Any combination of 2 courses chosen	CS 171: Introduction to Computer Science II
from the following:	
	*Any Math or CS classroom-course numbered 200 or above
The sequence: Physics 151/152	General Physics I and II
1 course chosen from the following list:	Physics 253: Modern Physics with Lab
	Physics 361: Analytical Mechanics
	Physics 365: Electromagnetic Fields
	Chem/Bio 330: Molecular Modeling
	Chem 331: Physical Chemistry I
	Econ 320: Econometrics
	Math/Econ 425: Mathematical Economics

* Excludes Math 207, Math 210, and Directed Study

** Students pursuing an Applied Mathematics BS do not have to have completed Math 250 by the end of their sophomore year.