

Program Description

The Minor in Applied Mathematics is comparable to our mathematics minor, with a focus on applied, rather than pure, mathematical learning. One cognate requirement takes students outside the mathematics department to learn mathematical practice put to use in other disciplines. The minor is designed to introduce students to mathematical tools for scientific analysis, such as Calculus, Statistics, Probability, and Linear Algebra.

Program Requirements

The applied mathematics minor consists of MATH 152 – Calculus II, four elective courses (12-13 hours) in applied mathematics selected from a list below, and one cognate course outside of the mathematics department.

Required Courses:	Credits
MATH 152 – Calculus II	4

Elective Courses:	Credits
MATH 125 – Probability and Statistics I (3)	12-13
MATH 253 – Multivariate Calculus (4)	
MATH 375 – Linear Algebra I (3)	
MATH 390 – Differential Equations (3)	
MATH 425 – Applied Combinatorics (3)	
MATH 461 – Probability and Mathematical Statistics I (3)	
MATH 526 – Linear Algebra II (3)	
MATH 562 – Probability and Mathematical Statistics II (3)	
MATH 567 – Complex Variables/Applications (3)	

Cognate Requirement:

Three credits outside of the mathematics department in a course which has significant applications of mathematical tools and ideas. This course requires prior approval of the chair of the mathematics department and will typically be upper division.

Special Note:

The courses required for the mathematics minor must be completed with a minimum grade of 2.0/S and 17 of the 20 hours must be taken for a numerical grade

Special Note for Transfer credit:

A minimum of three courses above must be taken in residence (not transfer credits).

Special Note on Math 340:

MATH 340 – Set Theory and Logic (3) is a prerequisite for many of the elective courses above. Students may satisfy the requirements of the minor without Math 340 by taking for example Math 125, Math 253, Math 390, Math 461, and a cognate.

Special Note for Mathematics Minors and Majors:

The minor in applied mathematics is not available to mathematics minors.

The minor in applied mathematics is available to mathematics majors, but only two courses may be counted toward both programs. A mathematics major may satisfy the requirements for the applied mathematics minor by taking three further applied mathematics courses and one cognate course. Math majors may substitute, with prior approval of the chair, an extra cognate course for one elective course.