

# VASSAR COLLEGE

## Requirements for Mathematics and Statistics Majors

### *Foundation Courses*

Math 126/127 or its equivalent\* (Calculus II)  
Math 220 (Multivariable Calculus)  
Math 221 (Linear Algebra)

\*For example, AP credit for Calculus BC. If you have AP credit for Calculus AB, you should take Math 127. If you took Calculus in high school but did not take the AP exams, then you can obtain credit for the course through a test the department gives. Permission from the department to enroll in Math 220 is also advanced placement.

### *Gateway Courses*

Two of  
Math 261 (Number Theory)  
Math 228 (Methods of Applied Mathematics)  
Math 240 (Introduction to Statistics)\*\*

\*\*or Math 242 (Applied Statistical Modeling) with advanced placement credit.

With an advisor, choose a pathway in the major.

### *Pathway in Core Mathematics*

Math 321 (Real Analysis)  
Math 361 (Modern Algebra)  
  
plus three courses, two at the 300-level

### *Pathway in Mathematics with emphasis on applications*

Math 321 (Real Analysis)  
Math 315 (Advanced Topics in Applied Mathematics)  
  
plus three courses, two at the 300-level

### *Pathway in Mathematics with emphasis on statistics*

Math 241 (Probability)  
Math 242 (Applied Statistical Modeling)  
  
plus three courses at the 300-level, at least two of which are Statistics courses

### *Intensives*

In the senior year, every major will complete at least one<sup>†</sup> intensive course.

<sup>†</sup>may be 0.5 or 1.0 unit.

**Recommendations:** The Department recommends that majors take a programming course in Computer Science. Students following pathways in applied mathematics and in statistics should take courses in related fields in which mathematics and statistics are applied.