# **BA Mathematics**

#### **Basic Requirements:**

MATH 221: Calculus I (CCC: MATH 1610)

• MATH 112 is prerequisite (CCC: MATH 1413)

MATH 222: Calculus II (CCC: MATH 1620)

MATH 223: Calculus III (CCC: MATH 2610)

MATH 233 - Linear Algebra I (CCC: MATH 2560)

MATH 239: Introduction to Mathematical Proof (CCC: MATH 2350)

MATH 324: Real Analysis

Choose one of the following (3 credits):

MATH 230: Programming and Mathematical Problem Solving (CCC: ENGR 1050) MATH 345: Numerical Analysis I MATH 382: Discrete Wavelets and Applications MATH 384: Computational Graphics MATH 385: Mathematical Reasoning and Advanced Programming Techniques

## **Required Options:**

Choose three of the following:

MATH 326: Differential Equations (CCC: MATH 2620) MATH 330: Abstract Algebra MATH 333: Linear Algebra II MATH 335: Geometry MATH 345: Numerical Analysis I

MATH 341: Probability and Applied Statistics (CCC: MATH 2410\*) OR MATH 360: Probability

MATH 371: Complex Analysis

### **Research and Presentation Requirement:**

MATH 348: Oral Presentation & Research Seminar

### **Elective Requirements:**

Two additional 3 credit courses at the 300-level.

\*Students taking MATH 2410 who are intent on pursuing a career in statistics or wanting to take MATH 361 should consult with the SUNY Geneseo Mathematics Department Chair