Bachelor of Science in Mathematics (code MATHBS01) (120 units)

This program requires a selection of fundamental courses in algebra, statistics, and analysis be taken. It is the most flexible program, in which the greatest number of electives may be chosen. Elective upper division mathematics courses are available which meet the needs of students preparing careers in industry and government, secondary teaching, and graduate study. Students who do not wish to complete the requirements for a declared option in applied mathematics or statistics may wish to elect courses in one or both of these areas as part of this degree program.

Requirements

Lower Division:

- Take all the following courses:
  - MATH 122 Calculus I (4)
  - MATH 123 Calculus II (4)
  - MATH 224 Calculus III (4)
  - MATH 233 Fundamental Concepts for Adv Math (3)
  - MATH 247 Introduction to Linear Algebra (3)
  - CECS 174 Introduction to Programming and Problem Solving (3)
  - PHYS 151 Mechanics and Heat (4)
- Take one of the following courses:
  - ENGL 101 Composition (3)
  - ENGL 317 Technical Communication (3)

Upper Division:

A minimum of 30 units of approved courses selected in consultation with a major advisor, to include the following:

- Take one of the following courses:
  - MATH 341 Number Theory (3)
  - MATH 347 Linear Algebra (3)
- Take all of the following courses:
  - MATH 361A Introduction to Mathematical Analysis I (3)
  - MATH 361B Introduction to Mathematical Analysis II (3)
  - MATH 364A Ordinary Differential Equations I (3)
  - MATH/STAT 380 Probability and Statistics (3)
  - MATH 444 Introduction to Abstract Algebra (3)
  - (may not include MATH 303I, 370A, 370B, or 409)

To allow flexibility, only 18 of the required 30 units are specified. Students should choose the remaining 12 units after discussing career goals and interests with an advisor.