Mathematics

Major

1. Basic Courses (21 hours)
   MATH 236 Calculus I (Core Skill 3)
   MATH 237 Calculus II
   MATH 238 Calculus III
   MATH 315 Foundations of Mathematics
   MATH 330 Linear Algebra I
   MATH 491 Seminar in Mathematics (Capstone)

2. Electives (21 hours)
   Select from courses at the 300 or 400 level, except MATH 340 Fundamentals of Geometry or MATH 495 Internship in Mathematics. You must select at least one course from each of the following groups.

   A. Geometry and Topology
      MATH 440 Modern College Geometry
      MATH 460 Introductory Topology

   B. Analysis
      MATH 425 Introduction to Real Analysis
      MATH 426 Introduction to Complex Analysis

   C. Algebra
      MATH 451 Modern Higher Algebra
      MATH 452 Linear Algebra II

   D. Applied Mathematics
      MATH 380 Introduction to Probability and Statistics
      MATH 432 Differential Equations
      MATH 436 Mathematical Physics
      MATH 470 Mathematical Models and Applications
      MATH 480 Probability and Statistics

Minor

1. Basic Courses (12 hours)
   MATH 236 Calculus I (Core Skill 3)
   MATH 237 Calculus II
   MATH 238 Calculus III

2. Electives (9 hours)
   Select from courses at the 300 or 400 level, except MATH 340 Fundamentals of Geometry or MATH 495 Internship in Mathematics
Summary of Requirements for Focus in Mathematical Sciences

Focus

1. Core Mathematics Courses: (3 hours)
   From among:
   - MATH 415 Foundations of Mathematics
   - MATH 425 Introduction to Real Analysis
   - MATH 440 Modern College Geometry
   - MATH 451 Modern Higher Algebra
   - MATH 452 Linear Algebra II
   - MATH 460 Introductory Topology
   - MATH 465 Theory of Numbers

2. Applied Mathematics: (9 hours)
   From among:
   - MATH 380 Introduction to Probability and Statistics
   - MATH 426 Introduction to Complex Analysis
   - MATH 432 Differential Equations
   - MATH 436 Mathematical Physics
   - MATH 437 Combinatorics and Graph Theory
   - MATH 440 Modern College Geometry
   - MATH 451 Modern Higher Algebra
   - MATH 461 History of Mathematics
   - MATH 465 Theory of Numbers
   - MATH 492 Internship Seminar

3. Required Courses in Other Departments:

   Computer Science (7-8 hours)
   From among:
   - COSC 240 Computer Science I
   - COSC 241 Computer Science II
   - COSC 350 Low-Level Programming Concepts
   - COSC 450 Programming Language Principles and Paradigms

   Science (3-4 hours)
   - PHYS 261 Principles of Physics I (GEP Group C) or
   - CHEM 441 Physical Chemistry I