

Mathematical Sciences

For Focus

Hours Required in Mathematics:	12
Hours Required in Other Departments:	12-13
Total Hours Required:	24-25

Focus

Coordinator:

Richard Weimer, Chair,
Department of Mathematics

- You may elect to focus in Mathematical Sciences.
- The Mathematical Sciences Focus is designed for Mathematics, Chemistry, and Physics majors.
- You cannot major or minor in Mathematical Sciences.

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
- MATH 460 Introductory Topology
- MATH 465 Theory of Numbers

2. Applied Mathematics:

(9 hours)

From among:

- MATH 320 Multivariable Calculus
- MATH 380 Introduction to Probability & Statistics
- MATH 420 Advanced Calculus
- MATH 426 Introduction to Complex Analysis
- MATH 432 Differential Equations
- MATH 435 Numerical Analysis
- MATH 436 Mathematical Physics
- MATH 437 Combinatorics & Graph Theory
- MATH 470 Mathematical Models and Applications
- MATH 480 Probability and Statistics
- MATH 481 Applied Regression Analysis
- MATH 492 Internship Seminar

3. Required Courses in Other Departments:

Computer Science

(9 hours)

From among:

- COSC 200 Computer Science I
- COSC 201 Computer Science II
- COSC 350 Computer Organization & Assembly Language
- COSC 450 Programming Language Structures

Science

(3-4 hours)

- PHYS 261 Principles of Physics I *or*
- CHEM 441 Physical Chemistry