

Mathematical Sciences

Focus

Coordinator:

Marc Michael, 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.

	FOCUS
Hours Required in Mathematics:	12
Hours Required in Other Departments:	10-12
Total Hours Required:	22-24

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 420	Advanced Calculus
MATH 426	Introduction to Complex Analysis
MATH 432	Differential Equations
MATH 435	Numerical Analysis
MATH 436	Mathematical Physics

MATH 437	Combinatorics and 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 (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