

## MATHEMATICS

### KEY POINTS ABOUT THE MAJOR

- Prepares students for a wide range of careers.
- Minor concentrations can be used to enhance career opportunities.
- Students learn to communicate mathematical ideas in written and oral forms.
- Problem-solving skills are used in a variety of situations.

“Increasingly, today’s mathematician needs to be a good communicator, to understand how to mathematically model various real-life situations and to have a broader educational background as they respond to career challenges in today’s changing job market. Majoring in mathematics grounded in the liberal arts tradition gives students the preparation to meet these challenges.”

— Shannon C. Markiewicz, Ph.D.,  
Assistant Professor of Mathematics



## Sample Four-Year Plan

The sample course plan below is a sample plan for your major. It does not and should not replace meeting with your Academic Advisor to map the best course plans that suit your individual academic needs and placement upon initial registration. Classes listed may not necessarily be offered during a particular term.

### First Year (Freshman)

Fall Semester		Spring Semester	
ENG 110 College Writing I	3	ENG 111 College Writing II	3
Freshman Core Seminar 179	3	MTH 241 Calculus II	4
MTH 240 Calculus I	4	Social and Behavioral Science Requirement	3
CIS 150 Programming in C/C++	3	Theology or Philosophy Requirement *	3
Elective***	3	Elective***	3

### Second Year (Sophomore)

Fall Semester		Spring Semester	
MTH 300 Foundations in Mathematics	3	MTH 350 Linear Algebra	3
MTH 242 Multivariable Calculus (odd years) or MTH Elective (even years)	4 or 3	Language Requirement**	3
PHY 219 General Physics I	4	Arts and Ideas Requirement	3
Sophomore Core Seminar 279	3	Electives***	6
Elective***	3		

### Third Year (Junior)

Fall Semester		Spring Semester	
MTH 242 Multivariable Calculus (odd years) MTH Elective (even years)	4 or 3	MTH Elective	3
Junior Core Seminar 379	3	Theology Requirement*	3
Electives***	9	Philosophy Requirement*	3
		Social and Behavioral Science Requirement	3
		Elective***	3

### Fourth Year (Senior)

Fall Semester		Spring Semester	
MTH 450 Abstract Algebra	3	Arts and Ideas Requirement	3
Theology or Philosophy Requirement *	3	MTH Elective	3
MTH/CIS 479 Senior Core Seminar	3	Electives***	9
Arts and Ideas Requirement	3		
Elective***	3		

Note: Although it is possible to take more than two math courses in a semester, students should not be advised to do so.

\*At least one Theology and one Philosophy course must be at the 200 level or higher.

\*\*Diversity requirement will be fulfilled with this requirement.

\*\*\*Students may focus electives toward completing a minor. Most minors consist of 20-24 credits.

## For More Information

Full descriptions for all ODU courses are available on the ODU website. Core curriculum and four-year course blueprint are based on the 2012-2013 edition of the ODU Course Catalog.

For more information, contact your Admission Counselor or Academic Advisor at 614.251.4500 or at [admissions@ohiodominican.edu](mailto:admissions@ohiodominican.edu).

## MATHEMATICS

### COURSES WITHIN THE MAJOR

- Calculus I and II
- Multivariable Calculus
- Linear Algebra
- Foundations of Mathematics
- Abstract Algebra
- Physics
- Programming in C/C++
- Differential Equations
- Real and Complex Analysis

“Ohio Dominican University is blessed with an outstanding Math department. Our Math faculty are not only highly skilled but highly effective in transferring their skills to their students. Our Math faculty are very approachable and make themselves available to help students in the learning process. Math classes are a more intimate size than found in large state schools, which allows for more individualized help.”

— Ken George,  
ODU Graduate 2009

# OHIO DOMINICAN UNIVERSITY™

## Program Overview

Students majoring in Mathematics receive a solid foundation in mathematics with courses ranging from the calculus sequence to foundations in mathematics, as well as linear and abstract algebra and calculus-based physics. Students choose from a selection of courses, including mathematical statistics, differential equations, real and complex analysis, geometry and physics to complete major requirements. This major is designed to prepare students for careers in industry, government or for additional study in graduate school.

## Why ODU?

- Personal attention and guidance provided by skilled academic advisors in mathematics.
- Career flexibility made possible by a liberal arts degree.
- Small class sizes provide more faculty-student interaction.

## Internships & Research

Several students have had summer internships. Some students presented results of their work at conferences.

## Career Possibilities

ODU Mathematics majors are prepared to take their place in the 21<sup>st</sup> century workforce. The fields of business, medicine, industry, education and government use Mathematics majors, who find professional satisfaction in jobs such as computer science, engineering, statistical analysis, national security or the actuarial sciences.

Examples of entry-level career positions include Actuarial Assistant, Analyst, Programmer Analyst, Business Analyst, Problem-Solver, Junior Programmer and Consultant-Mathematics.

## On Campus Opportunities

Majors can participate in tutoring in the Math Lab. They also can collaborate with faculty on projects.

## For More Information About the Mathematics Program

Contact Dr. Theresa Holleran, Chair of the Division of Mathematics, Computer and Natural Sciences, at [hollerat@ohiodominican.edu](mailto:hollerat@ohiodominican.edu) to learn more about the Mathematics program and/or any of the other programs in this division such as Integrated Mathematics, Biology, Chemistry, Environmental Science and Computer Information Systems.