

MATHEMATICS

Did you ever stop to think about how a video game works? How about a 3D movie, Google searches, GPS navigators, or that new app you just downloaded? These are just a few examples of where mathematical formulas and logic are applied for particular uses. Other examples can be found in the fields of actuarial science, operations research, and economics.

Mathematics at King's College

The aim of the King's College mathematics program is to provide students with a sound background in both pure and applied mathematics, while inculcating a respect for objective reasoning, clear ideas, and precise expression (elements which truly characterize a liberal arts education). Our goal is to make students sophisticated in the way they think and in the way they approach problems. This heightened sophistication will naturally extend beyond the boundaries of mathematics into other areas.

The Mathematics Department provides a thorough undergraduate training for those desiring mathematics-based careers in education, research, business, industry, and government. The student majoring in mathematics receives the Bachelor of Arts degree. For those seeking additional education beyond King's College, the College's mathematics program provides students with the necessary prerequisites to be successful in graduate school.

Double major and major-minor options are available to students in conjunction with chemistry, computer information systems, computer science, biology, economics, and other disciplines. Interested students should



consult with the department chairperson (570-208-5900 ext. 5739) for specific information.

Career Opportunities

One of the advantages of majoring in mathematics is the many career opportunities it provides. The use of mathematics is ubiquitous in today's world. Businesses, industries, and government agencies are in constant need of skilled problem solvers. In fact, the National Security Agency is the number one employer of mathematicians in the United States; the agency recognizes that mathemati-

cians are the true professionals in the area of problem solving.

While some students will seek careers as teachers, worldwide dependence upon predictive modeling and statistical analysis has created numerous opportunities for mathematicians. Occupations for which a mathematics degree is essential include actuarial scientist, computer analyst, computer programmer, economist, engineering analyst, information scientist, marketing research analyst, mathematician, numerical analyst, operations researcher, statistician, and systems analyst.

To learn more about majoring in Mathematics at King's College, please contact the Office of Admission at 1-888-KINGS PA or admissions@kings.edu.

Mathematics (120 Credit Hours - General Track)

Suggested Sequence

A suggested course sequence of degree requirements is listed below. Refer to the college catalog for course titles, descriptions, and prerequisites. Always consult your Academic Advisor when planning and scheduling your classes.

1 st Year - Fall		cr.	1 st Year - Spring		cr.
MATH 127 Logic & Axiomatics		3	MATH 130 Analytic Geometry & Calculus II		4
MATH 129 Analytic Geometry & Calculus I		4	CS 111 Program. for Sci. & Eng. or Core Course I		3
Core Course		3	Core Course		3
Core Course		3	Core Course		3
Core Course		3	Core Course		3
HCE 101 Holy Cross Experience		1			
		17			16
2 nd Year – Fall			2 nd Year – Spring		
MATH 231 Analytic Geometry & Calculus III		4	MATH 250 Linear Algebra		4
MATH 235 Discrete Mathematics		3	Core Course I or Free Elective		3
Core Course		3	Core Course		3
CS 112 Intro. to Programming		3	CS 120 OO Software Development or Core Course		3
Science Group		3	Science Group		3
		16			16
3 rd Year – Fall			3 rd Year – Spring		
MATH 367 Real Analysis I		3	MATH 490 Junior Seminar		1
MATH Track		3	MATH Track		3
Core Course		3	MATH Track		3
Core Course		3	Core Course		3
Free Elective		3	Free Elective		3
		15			13
4 th Year – Fall			4 th Year – Spring		
MATH 425 Abstract Algebra		3	MATH Track		3
MATH Track		3	Core Course or Free Elective		3
Core Course		3	Free Elective		3
Free Elective		3	Free Elective		3
Free Elective		3	Free Elective		3
		15			15
Total Credits Required for Graduation = 120					