

CHEMISTRY



As any good science student knows, the basic definition of chemistry is the study of matter and energy and the interactions that occur between them. However have you ever stopped to think about how the study of matter “matters” in life? So many of the things that we depend upon to function every single day are made possible through the science of chemistry. For instance, the shampoo you used this morning to wash your hair was made possible through chemistry. Or how about the nachos and cheese microwaved last night to snack on while you watched TV? Guess what? Your snacking and viewing pleasure was made possible through chemistry. The list of how chemistry impacts our every day life is endless, and at King’s you will learn why it all “matters.”

What Makes Us Different

At King’s you will not only study the various branches of chemistry and learn the fundamentals of the scientific

method, but you will also develop your reasoning and analytical skills as you examine the results of your own research. This unique opportunity, which can begin as early as your first year, will prepare you to make an immediate impact in the workforce or graduate school.

“By conducting research, our students not only gain a better understanding of how the various branches of chemistry are interrelated, but they also learn what it means to be a scientist,” explains Dr. Brian Williams, chairperson of the chemistry department. “This understanding is very important because it prepares our students to meet the expectations they will face in the workforce or graduate school.”

It is also important to note that King’s program is certified by the American Chemical Society. This certification, which is only granted to those programs that meet a stringent set of requirements, indicates King’s

commitment to continuous program improvements and to providing its students with a quality education. That quality is evident when our students graduate because they have not only earned a chemistry degree, but they have also become fully trained chemists.

Placement Highlights

Listed below are just a few of the various workplaces and graduate schools where our alumni have found success.

- Merck & Co., Inc. (pharmaceutical development)
- Downingtown High School (teaching)
- University of Pittsburgh School of Medicine
- Ph.D. programs in various areas of study at Princeton University, University of Pennsylvania, Cornell University, Pennsylvania State University, University of Pittsburgh, Syracuse University, and M.I.T.

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

Chemistry (122 Credit Hours - General Track)

Suggested Sequence

- Use the information below as a guide when selecting courses.
- Consult your Academic Advisor prior to course registration.
- Refer to the King's College Catalog and/or website for course titles and descriptions.
- Choose one course from each CORE category as listed for Chemistry Majors
 - CORE courses may be taken in any order approved by the academic advisor with the following conditions:
 - CORE 100 and CORE 110 should be taken in the first year.
 - CORE 115 (or 116) should be taken within the first two years.
 - For students selecting a Foreign Language (CORE 14x), every effort should be made to register for that language in the first semester at King's.

1 st Year - Fall		1 st Year - Spring	
	cr.		cr.
CHEM 113 General Chemistry I	3	CHEM 114 General Chemistry II	3
CHEM 113L General Chemistry I Lab	1	CHEM 114L General Chemistry II Lab	1
MATH 129 Analytic Geometry & Calculus I	4	MATH 130 Analytic Geometry & Calculus II	4
PHYS 113 Physics for Scientists & Engineers I	3	PHYS 114 Physics for Scientists & Engineers II	3
PHYS 113L Physics for Sci. & Eng. I Lab	1	PHYS 114L Physics for Sci. & Eng. II Lab	1
CORE	3	CORE	3
CORE 090	1		
	16		15
2 nd Year - Fall		2 nd Year - Spring	
CHEM 241 Organic Chemistry I	3	CHEM 242 Organic Chemistry II	3
CHEM 241L Organic Chemistry I Lab	1	CHEM 242L Organic Chemistry II Lab	1
CHEM 243 Analytical Chemistry	3	CHEM 244 Instrumental Analysis	3
CHEM 243L Analytical Chemistry Lab	2	CHEM 244L Instrumental Analysis Lab	2
MATH 237 Applied Linear Algebra	3	MATH 238 Differential Equations	3
CORE	3	CORE	3
	15		15
3 rd Year - Fall		3 rd Year - Spring	
CHEM 357 Physical Chemistry I	3	CHEM 358 Physical Chemistry II	3
CHEM 357L Physical Chemistry I Lab	2	CHEM 358L Physical Chemistry II Lab	2
CHEM 351 Chemical Information Science	1	CORE	3
CORE	3	CORE	3
CORE	3	Free Elective	3
Free Elective	3		
	15		14
4 th Year - Fall		4 th Year - Spring	
CHEM 493 Senior Colloquium	1	CHEM 494 Senior Colloquium	1
CHEM 471 Advanced Inorganic Chemistry	3	CORE	3
CORE	3	CORE	3
CORE	3	CORE	3
CORE	3	Free Elective	3
Free Elective	3	Free Elective	3
	16		16
Total Credits Required for Graduation = 122			