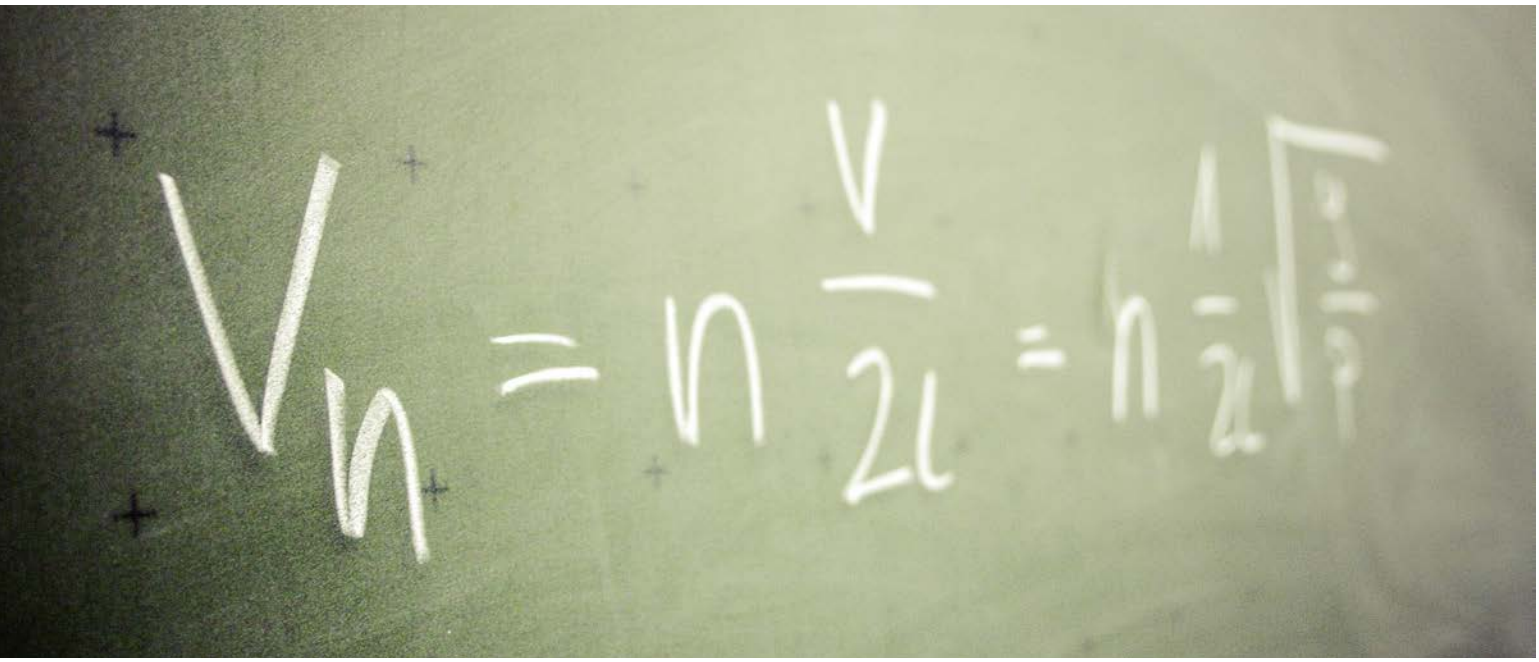
PHYSICS



Perhaps you have heard of Dark Matter, a mysterious substance that comprises the majority of the Universe, and want to figure out what it is. Perhaps you have grown up in awe of the night sky and wondered exactly what makes the stars shine. Or, perhaps you simply wonder why one half of your frozen hot dog stays frozen in a microwave oven and the other half doesn't. Whatever your question, it is likely that physics holds the answer.

Physics is the broadest of the natural sciences, and more than any other, seeks to explain the nature of the universe. If you enjoy asking, and answering, questions about the nature of the Universe around you, you should consider a physics major.

Physics at King's

At King's, the low faculty-to-student ratio will ensure that you get the individual attention that you need to master the course material and to prepare for life after graduation. Not only will your instructors know your name, but students are also strongly encouraged to participate in faculty projects on original physics research. The undergraduate research experience provides a distinct advantage when entering the workforce or graduate school.

All students at King's take 52 credits in the Core Curriculum, developing a sophisticated base of knowledge in the liberal arts and sciences, and developing the transferable skills of liberal learning: critical thinking, effective oral and written communication, information literacy, moral reasoning, quantitative reasoning, and technological competency. The knowledge, skills and dispositions students acquire by virtue of the hallmark CORE curriculum at King's will enhance their ability to be successful contributors within their chosen career field.

Job Opportunities

As is the case with most liberal arts degrees, you can do almost anything you want to with a physics degree. To a great extent, your career won't rely on the details that you learn in your specific classes, but more so on the techniques that you learn here and the work ethic that you develop. From that perspective, a physics degree often looks quite good on a job resume. A perspective employer will look at this and immediately think of someone who has a good mathematical background, someone who has had a lot of practice analyzing complicated problems methodically and trying to come up with logical solutions, someone who has probably had some good experience with computers, and someone who will be able to actually understand a lot of the modern technology that is so central to a lot of businesses today.

A degree in physics can land you in a variety of places. Physics majors go on to work in the:

- Private sector including jobs related to engineering, computer or information systems
- Government sector at national research labs
- Military
- Finance and banking industry
- Secondary and higher education systems
- Professional programs like medical school or law school

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

Physics (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 Physics 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.

1st Year - Fall	cr.	1st Year - Spring	cr.
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
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 Calculus I	4	MATH 130 Calculus II	4
CORE	3	CORE	3
CORE 090 First Year Experience	1		
	16		15
2nd Year – Fall		**2nd Year – Spring**	
PHYS 231 Modern Physics	3	PHYS 330 Classical Mechanics	3
PHYS 231L Modern Physics Lab	1	PHYS Elective	3
MATH 231 Calculus III	4	MATH 238 Differential Equations	3
MATH 237 Applied Linear Algebra	3	CORE	3
CORE	3	Free Elective	3
CORE	3		
	17		15
3rd Year – Fall		**3rd Year – Spring**	
PHYS 371 Electricity & Magnetism I	3	PHYS Elective	3
CORE	3	CORE	3
CORE	3	CORE	3
CORE	3	CORE	3
Free Elective	3	Free Elective	3
	15		15
4th Year – Fall		**4th Year – Spring**	
PHYS 350 Thermodynamics & Stat. Mechanics	3	PHYS 440 Quantum Mechanics	3
CORE	3	PHYS Elective	3
CORE	3	CORE	3
Free Elective	3	Free Elective	3
Free Elective	3	PHYS 490 Senior Seminar	2
	15		14
Total Credits Required for Graduation = 122			

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