

PHYSICS

BACHELOR OF SCIENCE (B.S.)

CORE Requirements	Credits	Major Requirements	Credits	Major Requirements	Credits	Free Electives ²	Credits
CORE 090 First Yr Exp.	1	PHYS 113	3	CHEM 113	3	Free Elective	3
CORE 100 Lib Arts Sem.	3	PHYS 113L	1	CHEM 113L	1	Free Elective	3
CORE 110 Effect Writ.	3	PHYS 114	3	CHEM 114	3	Free Elective	3
CORE 115 or 116 Oral Comm.	3	PHYS 114L	1	CHEM 114L	1	Free Elective	3
CORE 131 or 133 Civilization	3	PHYS 231	3	MATH 129	4	Free Elective	3
CORE 140 or 141-145 Forgn.	3	PHYS 231L	1	MATH 130	4	Free Elective	3
CORE 150-159 Soc. Sci. ¹	3	PHYS 330	3	MATH 231	4		
CORE 160-164 Literature	3	PHYS 350	3	MATH 237	3		
CORE 170-179 The Arts	3	PHYS 371	3	MATH 238	3		
CORE 180-189 Amer. Studies ¹	3	PHYS 440	3				
CORE 190-199 Global Studies ¹	3	PHYS 490	2				
CORE 250-259 Syst. Theology	3	PHYS Elective	3				
CORE 260-269 Mor. Theology	3	PHYS Elective	3				
CORE 280 Philos. I	3	PHYS Elective†	3				
CORE 281-289 Philos. II	3						
Total Credits for CORE	43	Total Credits for Major		61	Total Credits for Free Electives		18

Total Credits Required for Graduation = 122

Physics Electives - In addition to the Major Sequence requirements, a Physics Major must also complete a minimum of three (3) upper-level PHYS courses numbered 231 or higher. Some elective courses have a required laboratory component. Some courses in MATH or CHEM may be cross-listed as PHYS. †One Physics Elective can be satisfied with 3-credits of student research.

Physics Electives			
PHYS 241*	PHYS 233**	PHYS 372#	PHYS 340#
PHYS 242*	PHYS 234*	PHYS 320#	PHYS 450#
*Required for some 3+2 Engineering students			
#Appropriate preparation courses for physics graduate programs			

¹Students are required to take CORE 150, CORE 180 **OR** CORE 190 to fulfill the Interdisciplinary CORE requirement.

- If a student takes CORE 150, then he/she should choose from 181 – 188 to fulfill the 18x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 180, then he/she should choose from 151 – 158 to fulfill the 15x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 190, then he/she should choose from 151 – 158 to fulfill the 15x requirement AND from 181 – 188 to fulfill the 18x requirement.

²Students may select “free electives” for personal enrichment **OR** for Minor and/or Second Major Requirements.

General Information:

A student must earn a minimum of 120 credit hours to be awarded the baccalaureate degree. The number of credit hours required for graduation may be higher in certain major programs **or** if the student elects to pursue a second major.

Beyond the requirements of the Core Curriculum and of a student’s chosen major program, the balances of the credit hours required for graduation are “free electives.”

PHYSICS

SUGGESTED SEQUENCE

- Use the information below as a guide when selecting courses.
- Refer to the reverse side when selecting major courses, major electives, core courses, and free electives when applicable.
- 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 on the reverse side.
 - 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 available semesters.
 - 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 available 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 ²	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 ²	3		Free Elective ²	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 ²	3		Free Elective ²	3	
Free Elective ²	3		PHYS 490 Senior Seminar	2	
	15			14	
			Total Credits Required for Graduation = 122		