Physics – Business

Bachelor of Science (BS.PHYS(BUS))

Core Requirements				Credits	Notes/Instructions
College Sem.		Quest for Meaning	CSEM 100	3	†A student may be required to take ENGL 105 and/or MATH 100 based on placement exams administered prior to their first semester at King's College. ENGL 105 and MATH 100 are 3-credit courses and will count as free electives. †† The Intercultural Competence requirement can be satisfied by taking a 100-level language class for 3 credits or participating in an approved Study Abroad experience. . (See college catalog for more information) **SBM** = Satisfied By Major requirement(s) and credit(s) listed below.
Communication & Creative Expression		Writing	ENGL 110†	3	
		Oral Communication	COMM 101	3	
		Literature	ENGL 140-149	3	
		The Arts	ARTS 100-149	3	
Citizenship		History	HIST 100-149	3	
		Intercultural	FREN/GERM/SPAN 100-level or Study Abroad††	3	
		Global Connections	ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3	
Quantitative & Scientific Reasoning	SBM	Quantitative Reasoning	MATH 120† or higher level	-	
	SBM	Scientific Endeavor	NSCI 100	-	
	SBM	Science in Context	NSCI 171-199	-	
	SBM	Human Beh. & Soc. Inst	**ECON 111, 112**; GEOG 101, 102; PS 101, PSYC 101, SOC 101	-	
Wisdom, Faith, & the Good Life		Introduction to Phil.	PHIL 101	3	
		Phil. Investigations	PHIL 170-199; MSB 287	3	
		Theology & Wisdom	THEO 150-159	3	
		Theology & the Good Life	THEO 160-169	3	
			Total Core Credits	**36**	

	Physics Requirements	Credits
	PHYS 113[CR,PR]	3
	PHYS 113L	1
	PHYS 114[PR]	3
	PHYS 114L[PR]	1
	PHYS 231[PR]	3
	PHYS 231L[PR]	1
	PHYS 330[PR]	3
	PHYS 350[PR]	3
	PHYS 371[PR]	3
	PHYS 440[PR]	3
	PHYS 490[PR]	3
	PHYS Elective*[PR]	3
	PHYS Elective*[PR]	3
	PHYS Elective**[,PR]	3
Total Major Credits		**36**

	Physics Requirements	Credits
	CHEM 113	3
	CHEM 113L	1
	CHEM 114[PR]	3
	CHEM 114L[PR]	1
	MATH 129	4
	MATH 130[PR]	4
	MATH 231[PR]	4
	MATH 237[PR]	3
	MATH 238[PR]	3
	Other Requirements	
	HCE 101 Holy Cross Exp.	1
Total Major and Other Credits		**27**

	Business Requirements	Credits
	ECON 111[2]	3
	ECON 112	3
	ECON 221	3
	MSB 110	3
	MSB 120	3
	MSB 200	3
	MSB 210	3
	MSB 220	3
	Business Elective 1[4]	3
	Business Elective 2[4]	3
Total Business Credits		**30**

Total Credits Required for Graduation = 129

***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, ENGR or CHEM may be cross-listed as PHYS. One Physics Elective can be satisfied with 3-credits of student research.

**One Physics Elective can be satisfied with 3-credits of student research.

Physics Electives for Engineering	Physics Electives for Graduate School	
PHYS 241: Statics	PHYS 250: Relativity	PHYS 340: Optics
PHYS 242: Mechanics of Solids	PHYS 260: Num. Techniques	PHYS 420: Particle Phys.
PHYS 233: Electronics I	PHYS 285: Astrophysics	PHYS 450: Atomic & Nuclear Phys
PHYS 234: Electronics II	PHYS 320: Adv. Lab	
PHYS 360: Fluid Dynamics	PHYS 372: E&M II	

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."

See reverse side for a suggested sequence

Effective 07/01/23

Physics – Business

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.

	Fall	Credits		Spring	Credits
	PHYS 113[CR,PR] Physics for Scientists & Engineers I	3		PHYS 114[PR] Physics for Scientists & Engineers II	3
	PHYS 113L Physics for Sci. & Eng. I Lab	1		PHYS 114L[PR] Physics for Sci. & Eng. II Lab	1
	CHEM 113 General Chemistry I	3		CHEM 114[PR] General Chemistry II	3
	CHEM 113L General Chemistry I Lab	1		CHEM 114L[PR] General Chemistry II Lab	1
	MATH 129 Calculus I	4		MATH 130[PR] Calculus II	4
	Core Course[1]	3		Core Course[1]	3
	HCE 101 Holy Cross Experience	1			
		16			**15**

Summer	Credits

	Fall	Credits		Spring	Credits
	PHYS 231[PR] Modern Physics	3		MATH 237[PR] Math Methods for Phys. Sciences	3
	PHYS 231L[PR] Modern Physics Lab	1		PHYS Elective* [PR]	3
	MATH 231[PR] Calculus III	4		ECON 112[PR] Introduction to Microeconomics	3
	MATH 238[PR] Differential Equations	3		Core Course[1]	3
	ECON 111[PR] Introduction to Macroeconomics	3		Core Course[1]	3
	Core Course[1]	3			
		17			**15**

Summer	Credits

	Fall	Credits		Spring	Credits
	PHYS 371[PR] Electricity & Magnetism I	3		PHYS 330[PR] Classical Mechanics	3
	PHYS Elective* [PR]	3		MSB 120 Intro. to Management Control & Planning	3
	MSB 110 Introduction to Financial Reporting	3		MSB 210 Principles of Marketing	3
	MSB 200 Principles of Management	3		Core Course[1]	3
	Core Course[1]	3		Core Course[1]	3
	Core Course[1]	3		Core Course[1]	3
		18[4]			**18[4]**

Summer	Credits

	Fall	Credits		Spring	Credits
	PHYS 350[PR] Thermodynamics & Stat. Mechanics	3		PHYS 440[PR] Quantum Mechanics	3
	PHYS Elective**[,PR]	3		PHYS 490[PR] Senior Seminar	3
	ECON 221 Statistics & Predictive Analytics	3		MSB 220[PR] Financial Management	3
	Business Elective 1[3]	3		Business Elective 2[3]	3
	Core Course[1]	3		Core Course[1]	3
		15			**15**

Total Credits Required for Graduation = 129

NOTES:[1]Choose one course from each of the Core Requirements listed on the reverse side.

[2] Course may satisfy both a Major and a Core requirement. MATH 129 satisfies the Quantitative Reasoning Core requirement, PHYS 113 and CHEM 113 satisfy the Scientific Endeavor and Science in Context Core requirements, and ECON 111 or ECON 112 will satisfy the Human Behavior & Social Institutions Core requirement.

[3] Physics students are encouraged to pursue the following Fall/Spring course sequences to fulfill the Business Elective 1 and 2 requirements:

- Technology Management: BUS 363/L – Operations Management with Lab and BUS 435 – Global Innovation, Technology & Entrepreneurship
- Manufacturing & Operations Management: MKT 385 – Global Supply Chain Management and BUS 363/L – Operations Management with Lab
- Marketing: MKT 330 – Selling Strategies and MKT 390 – International Marketing
- Entrepreneurship: BUS 330 –Entrepreneurship Business Management and BUS 435 – Global Innovation, Technology & Entrepreneurship
- Accounting: ACCT 240/L – Intermediate Account I w/ Lab and ACCT 301 – Intermediate Accounting II

[4] Students are encouraged to take summer courses to relieve the course load pressure during this semester.

[PR] Course has a prerequisite – check college catalog.

[CR] Course has a co-requisite – check college catalog.