

Chemistry – Business**Bachelor of Science (BS.CHEM(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 and credits 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 ² , 112; GEOG 101, 102; PS 101, PSYC 101, SOC 101		-	
Wisdom, Faith, & the Good Life	Introduction to Phil.	PHIL 101		3	
	Phil. Investigations ³	PHIL 170-199; MSB 287 ³		3	
	Theology & Wisdom	THEO 150-159		3	
	Theology & the Good Life	THEO 160-169		3	
Total Core Credits				36	

Major Requirements		Credits	Major Requirements		Credits	Business Requirements		Credits
CHEM 113 ²		3	CHEM 114 ^{PR}		3	ECON 111 ²		3
CHEM 113L		1	CHEM 114L ^{PR}		1	ECON 112		3
CHEM 241 ^{PR}		3	CHEM 242 ^{PR}		3	ECON 221		3
CHEM 241L ^{PR}		1	CHEM 242L ^{PR}		1	MSB 110		3
CHEM 243 ^{PR}		3	CHEM 244 ^{PR}		3	MSB 120		3
CHEM 243L ^{PR}		2	CHEM 244L ^{PR}		2	MSB 200		3
CHEM 357 ^{PR}		3	CHEM 358 ^{PR}		3	MSB 210		3
CHEM 357L ^{PR}		2	CHEM 358L ^{PR,*}		2	MSB 220		3
CHEM 351 ^{PR}		1	CHEM 471 ^{PR}		3	Business Elective 1 ⁴		3
CHEM 493 ^{PR}		1	CHEM 494 ^{PR}		1	Business Elective 2 ⁴		3
MATH 129 ²		4	MATH 130 ^{PR}		4			
MATH 237 ^{PR}		3	MATH 238 ^{PR}		3			
PHYS 113 ^{2,CR}		3	PHYS 114 ^{PR}		3			
PHYS 113L		1	PHYS 114L ^{PR}		1			
			Other Requirements					
			HCE 101 Holy Cross Exp.		1			
Total Major Credits		31	Total Major and Other Credits		33	Total Business Credits		30

Total Credits Required for Graduation = 131

Students who wish to be eligible for certification by the American Chemical Society must include:

The four (4) courses below:				AND	One of the following 3 credit courses**			
CHEM 358L*	2 cr	CHEM 353***	3 cr		CHEM 359	CHEM 473	CHEM 476	CHEM 479
CHEM 471L	2 cr	CHEM 353L	2 cr	CHEM 425	CHEM 475	CHEM 477	CHEM 490	
							CHEM474	

*CHEM 358L may be replaced by a semester of research (CHEM 396, CHEM 397, CHEM 496, CHEM 497), but must be taken for American Chemical Society certification

** Or any other CHEM course numbered 359 or higher approved by the chair-person of the Chemistry Department

***BIOL 353 may substitute for CHEM 353

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 07/01/2025

Chemistry – 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 2022		Credits	Spring 2023		Credits
_____	CHEM 113 ² 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 ² Analytic Geometry & Calculus I	4	_____	MATH 130 ^{PR} Analytic Geometry & Calculus II	4
_____	PHYS 113 ^{2,CR} 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
_____	Core Course ¹	3	_____	Core Course ¹	3
_____	HCE 101 Holy Cross Experience	1			
		16			15
Summer		Credits			
Fall 2023		Credits	Spring 2024		Credits
_____	CHEM 241 ^{PR} Organic Chemistry I	3	_____	CHEM 242 ^{PR} Organic Chemistry II	3
_____	CHEM 241L ^{PR} Organic Chemistry I Lab	1	_____	CHEM 242L ^{PR} Organic Chemistry II Lab	1
_____	CHEM 243 ^{PR} Analytical Chemistry	3	_____	CHEM 244 ^{PR} Instrumental Analysis	3
_____	CHEM 243L ^{PR} Analytical Chemistry Lab	2	_____	CHEM 244L ^{PR} Instrumental Analysis Lab	2
_____	MATH 238 ^{PR} Differential Equations	3	_____	MATH 237 ^{PR} Math. Methods for the Phys. Sci.	3
_____	ECON 111 ² Introduction to Macroeconomics	3	_____	ECON 112 Introduction to Microeconomics	3
_____	Core Course ¹	3	_____	Core Course ¹	3
		18⁵			18⁵
Summer		Credits			
Fall 2024		Credits	Spring 2025		Credits
_____	CHEM 357 ^{PR} Physical Chemistry I	3	_____	CHEM 358 ^{PR} Physical Chemistry II	3
_____	CHEM 357L ^{PR} Physical Chemistry I Lab	2	_____	CHEM 358L ^{PR} Physical Chemistry II Lab	2
_____	CHEM 351 ^{PR} Technological Competency	1	_____	MSB 120 Intro. To Mgmt. Accounting & Planning	3
_____	MSB 110 Intro. To Financial Accounting 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
		15			17
Summer		Credits			
Fall 2025		Credits	Spring 2026		Credits
_____	CHEM 493 ^{PR} Senior Colloquium I	1	_____	CHEM 494 ^{PR} Senior Colloquium II	1
_____	CHEM 471 ^{PR} Advanced Inorganic Chemistry	3	_____	MSB 220 Financial Management	3
_____	ECON 221 Statistics and Predictive Analytics	3	_____	Business Elective 2 ⁴	3
_____	Business Elective 1 ⁴	3	_____	Core Course ¹	3
_____	Core Course ¹	3	_____	Core Course ¹	3
_____	Core Course ¹	3	_____	Core Course ¹	3
		16			16
Total Credits Required for Graduation = 131					

NOTES:

¹Choose one course from each of the Core Requirements listed on the reverse side.

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

³Students are encouraged to take either MSB 287 – Business Ethics to fulfill the Philosophical Investigation Core requirement.

⁴Chemistry 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 Accounting I with Lab and ACCT 301 – Intermediate Accounting II

⁵ 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.