

# CHEMISTRY

## BACHELOR OF SCIENCE (B.S.)

CORE Requirements	Credits	Major Requirements	Credits	Major Requirements	Credits	Free Electives <sup>2</sup>	Credits
CORE 090 First Yr Exp.	1	CHEM 113	3	CHEM 114	3	Free Elective	3
CORE 100 Lib Arts Sem.	3	CHEM 113L	1	CHEM 114L	1	Free Elective	3
CORE 110 Effect Writ.	3	CHEM 241	3	CHEM 242	3	Free Elective	3
CORE 115 or 116 Oral Comm.	3	CHEM 241L	1	CHEM 242L	1	Free Elective	3
CORE 131 or 133 Civilization	3	CHEM 243	3	CHEM 244	3	Free Elective	3
CORE 140 or 141-145 Forgn.	3	CHEM 243L	2	CHEM 244L	2		
CORE 150-159 Soc. Sci. <sup>1</sup>	3	CHEM 357	3	CHEM 358	3		
CORE 160-169 Literature	3	CHEM 357L	2	CHEM 358L*	2		
CORE 170-179 The Arts	3	CHEM 351	1	CHEM 471	3		
CORE 180-189 Amer. Studies <sup>1</sup>	3	CHEM 493	1	CHEM 494	1		
CORE 190-199 Global Studies <sup>1</sup>	3	MATH 129	4	MATH 130	4		
CORE 250-259 Syst. Theology	3	MATH 237	3	MATH 238	3		
CORE 260-269 Mor. Theology	3	PHYS 113	3	PHYS 114	3		
CORE 280 Philos. I	3	PHYS 113L	1	PHYS 114L	1		
CORE 281-289 Philos. II	3						
Total Credits for CORE	43	Total Credits for Major	64	Total Credits for Free Electives	15		

### Total Credits Required for Graduation = 122

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

The two (2) courses below:		One of the following	
CHEM 353**	<b>AND</b>	CHEM 359	CHEM 475
CHEM 471L		CHEM 477	CHEM 496
		CHEM 373	CHEM 476
		CHEM 479	CHEM 497

\*CHEM 358L may be replaced by a semester of research (CHEM 396, CHEM 397, CHEM 496, CHEM 497).

\*\*BIOL 353 may substitute for CHEM 353 and CHEM 396/7, 496/7.

<sup>1</sup>Students 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.

<sup>2</sup>Students 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.”

# CHEMISTRY

## 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 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 <sup>st</sup> Year - Fall		cr.	1 <sup>st</sup> Year - Spring		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			
		<b>16</b>			<b>15</b>
2 <sup>nd</sup> Year - Fall			2 <sup>nd</sup> 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 Math. Methods for Physical Sciences		3	MATH 238 Differential Equations		3
CORE		3	CORE		3
		<b>15</b>			<b>15</b>
3 <sup>rd</sup> Year - Fall			3 <sup>rd</sup> 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 Technological Competency		1	CORE		3
CORE		3	CORE		3
CORE		3	Free Elective <sup>2</sup>		3
Free Elective <sup>2</sup>		3			
		<b>15</b>			<b>14</b>
4 <sup>th</sup> Year - Fall			4 <sup>th</sup> 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 <sup>2</sup>		3
Free Elective <sup>2</sup>		3	Free Elective <sup>2</sup>		3
		<b>16</b>			<b>16</b>
<b>Total Credits Required for Graduation = 122</b>					