## **CHEMISTRY**

## **BACHELOR OF SCIENCE (B.S.)**

CORE Requirements	Credits
CODE COO E' N. E	1
CORE 090 First Yr Exp.	1
CORE 100 Lib Arts Sem.	3
CORE 110 Effect Writ.	3
CORE 115 or 116 Oral Comm.	3
CORE 131 or 133 Civilization	3
CORE 140 or 141-145 Forgn.	3
CORE 150-159 Soc. Sci. 1	3
CORE 160-164 Literature	3
CORE 170-179 The Arts	3
CORE 180-189 Amer. Studies <sup>1</sup>	3
CORE 190-199 Global Studies <sup>1</sup>	3
CORE 250-259 Syst. Theology	3
CORE 260-269 Mor. Theology	3
CORE 280 Philos. I	3
CORE 281-289 Philos. II	3
Total Credits for CORE	43

Major Requirements	Credits	Major Requirements	Credits
CHEM 113	3	CHEM 114	3
CHEM 113L	1 -	CHEM 114 CHEM 114L	<i>J</i>
CHEM 241	3 -	CHEM 114L CHEM 242	3
CHEM 241L	1 -	CHEM 242L	1
CHEM 241L CHEM 243	3	CHEM 242L CHEM 244	3
CHEM 243L	2 -	CHEM 244L	2
CHEM 243L CHEM 357	3	CHEM 244L CHEM 358	3
	2 -	<del></del>	2
CHEM 357L	1 -	CHEM 358L*	3
CHEM 351	_	CHEM 471	_
CHEM 493	1 -	CHEM 494	1
MATH 129	4 -	MATH 130	4
MATH 237**	3 _	MATH 238**	3
PHYS 113	3 _	PHYS 114	3
PHYS 113L	1 _	PHYS 114L	1
		Total Credits for Major	64

	Free Electives <sup>2</sup>	Credits
	Free Elective	3
Tot	tal 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***		CHEM 359	CHEM 475
CHEM 471L	<u>AND</u>	CHEM 477	CHEM 496
		CHEM 373	CHEM 476
		CHEM 479	CHEM 497

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

<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 <u>or</u> 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."

<sup>\*\*</sup>The mathematics requirements may alternatively be met by completion of a minor in mathematics that includes MATH 129 and 130.

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

# **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 <u>one</u> course from <u>each</u> CORE category as listed on the reverse side.
  - O 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.
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	
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		
	16		15
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** Applied Linear Algebra	3	MATH 238** Differential Equations	3
CORE	3	CORE	3
	15		15
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	
CHEM 351 Chemical Information Science	1	CORE	
CORE	3	CORE	
CORE	3	Free Elective <sup>2</sup>	
Free Elective <sup>2</sup>	3	·	
	15		14
4th Year - Fall		4th 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
	16		16
Total Credits	Required	1 for Graduation = 122	