## **COMPUTER SCIENCE**

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

CORE Requirements	Credits
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. <sup>1</sup>	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 270 Natural Science I	3
CORE 271-279 Nat. Sci. II	3
CORE 280 Philos. I	3
CORE 281-289 Philos. II	3

Total Credits for CORE

Major Requirements	Credits
CS 116 (fall only)	3
CS 116L (fall only)	0
CS 117 (spring only)	3
CS 117L (spring only)	0
CS 232 (fall only)	3
CS 232L (fall only)	1
CS 233 (spring only)	3
CS 233L (spring only)	1
CS 256	3
	1
CS 270	3
CS 270L	1
CS 480 (fall only)	3
CS 481 <b>OR</b> CS 499 (spring)	3
MATH 127	3
MATH 129	4
MATH 130	4
MATH 235	3
CS Elective*	3
Total Credits for Major	60

Free Electives <sup>2</sup>	Credits
Free Elective	3
Free Elective	3 3 3 3
Free Elective	3
Free Elective	3
Total Credits for Free Electives	12

## **Total Credits Required for Graduation = 121**

\*A student majoring in Computer Science must complete six (6) of the following CS Electives (only 2 can be CIS courses):

CS Electives*					
Choose any six (6) of the following courses:					
CS 305	CS 364	CS 448			
CS 315	CS 375	CIS 385			
CS 328	CS 380	CIS 386			
CS 336	CS 420	CIS 487			
A	ny CS course 300 or high	ner			

NOTE: The following "Free Electives" are recommended for Computer Science majors: MATH 126, MATH 237, PHYS 111 & PHYS 111L. CIS 106 is recommended particularly to freshman choosing between Computer Science and Computer Information Systems..

<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.

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."

# **COMPUTER SCIENCE**

## 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.
  - 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.
CS 116 Fund. of Programming I (fall only)	3	CS 117 Fund. of Programming II (spring only)	3
CS 116L Fund. of Program. I Lab (fall only)	0	CS 117L Fund. of Program. II Lab (spring only)	0
MATH 127 Logic & Axiomatics (fall only)	3	MATH 130 Analytical Geometry & Calculus II	4
MATH 129 Analytical Geometry & Calculus I	4	CORE	3
CORE or CIS 106 <sup>2</sup>	3	CORE	3
CORE 090 First Year Experience	1	CORE	3
	14		16
2 <sup>nd</sup> Year - Fall		2 <sup>nd</sup> Year – Spring	
CS 232 Data Structures (fall only)	3	CS 233 Adv. Data Structures (spring only)	3
CS 232L Data Structures (fall only)	1	CS 233 Adv. Data Structures Lab (spring only)	1
CS 256 Database Management Systems	3	CS 270 Computer Organization	3
CS 256L Database Management Systems Lab	1	CS 270L Computer Organization Lab	1
MATH 235 Discrete Mathematics	3	CORE	3
CORE	3	CORE	3
CORE	3	CORE	3
	17	<del></del>	17
3 <sup>rd</sup> Year – Fall		3 <sup>rd</sup> Year – Spring	
CS Elective*	3	CS Elective*	3
CS Elective*	3	CS Elective*	3
CORE	3	CORE	3
CORE	3	CORE	3
Free Elective <sup>2</sup>	3	Free Elective <sup>2</sup>	3
	15	<del></del>	15
4th Year - Fall		4th Year - Spring	
CS 480 Software Engineering	3	CS 481 Applied Software Engineering OR	3
CS Elective*	3	CS 499 CS Internship	3
CORE	3	CORE	3
CORE	3	Free Elective <sup>2</sup>	3
Free Elective <sup>2</sup>	3	(CORE or Free Elective <sup>2</sup> – if needed)	(3)
	15	<del></del> ;	12-15
Total Credits	Required	for Graduation = 121	