

COMPUTER SCIENCE

BACHELOR OF SCIENCE (B.S.)

CORE Requirements	Credits	Computer Science Requirements	Credits	Free Electives	Credits
CORE 090 First Yr Exp.	1	CS 116 Fun. of Software Dev. I	3	Free Elective	3
CORE 100 Lib Arts Sem.	3	CS 117 Fun. of Software Dev. II ³	3	Free Elective	3
CORE 110 Effect Writ.	3	CS 232 Data Structures (<i>fall</i>)	3	Free Elective	3
CORE 115 or 116 Oral Comm.	3	CS 232L Data Structures Lab (<i>fall</i>)	1	Free Elective	3
CORE 131 or 133 Civilization	3	CS 233 Adv. Data Structures (<i>spr</i>)	3		
CORE 140 or 141-145 Forgn.	3	CS 233L Adv. Data Structures Lab (<i>spr</i>)	1		
CORE 150-159 Soc. Sci ¹	3	CS 256 Database Management	3		
CORE 160-169 Literature	3	CS 256L Database Management Lab	1		
CORE 170-179 The Arts ³ (178)	3	CS 270 Computer Organization	3		
CORE 180-189 Amer. Studies ¹	3	CS 270L Computer Organization Lab	1		
CORE 190-199 Glbl Studies ^{1,2}	3	CS 480 Software Engineering (<i>fall</i>)	3		
CORE 250-259 Syst. Theology	3	CS 481 Applied Software Engineering	3		
CORE 260-269 Mor. Theology	3	OR	3		
CORE 270 Natural Science I	3	CS 499 CS Internship	3		
CORE 271-279 Nat. Sci. II	3	CS Elective*	3		
CORE 280 Philos. I	3	CS Elective*	3		
CORE 281-289 Philos. II ⁴	3	CS Elective*	3		
		CS Elective*	3		
		CS Elective*	3		
		CS Elective*	3		
		MATH 127 Logic & Axiomatics	3		
		MATH 129 Calculus I	4		
		MATH 130 Calculus II	4		
		MATH 235 Discrete Mathematics	3		
	49		60		12

Total Credits = 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
Any CS course 300 or higher		

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.

¹Students 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.

³CS 117 and CORE 178 form a learning community where students work on related projects in both classes. This combination is not required but is highly recommended.

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.
 - 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 st Year - Fall		cr.	1 st Year - Spring		cr.
CS 116 Fun. of Software Dev. I (<i>fall only</i>)		3	CS 117 ³ Fun. of Software Dev. II (<i>spring only</i>)		3
MATH 127 Logic & Axiomatics (<i>fall only</i>)		3	MATH 130 Analytical Geometry & Calculus II		4
MATH 129 Analytical Geometry & Calculus I		4	CORE 170-179 (<i>Core 178 Imaginative Writing</i> ³)		3
CORE 110 and/or CIS 106 ²		3	CORE 100 Liberal Arts Seminar		3
CORE 090 First Year Experience		1	CORE		3
		(3)			
<i>Note: (A student may take an additional course up to 17 credits)</i>		14 [†]			16
2 nd Year - Fall			2 nd Year - Spring		
CS 232 Data Structures (<i>fall only</i>)		3	CS 233 Adv. Data Structures (<i>spring only</i>)		3
CS 232L Data Structures (<i>fall only</i>)		1	CS 233 Adv. Data Structures Lab (<i>spring only</i>)		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			17
3 rd Year - Fall			3 rd Year - Spring		
CS Elective*		3	CS Elective*		3
CS Elective*		3	CS Elective*		3
CORE		3	CORE		3
CORE		3	CORE		3
Free Elective ²		3	Free Elective ²		3
		15			15
4 th Year - Fall			4 th 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 ²		3
Free Elective ²		3	(<i>CORE or Free Elective² - if needed</i>)		(3)
		15			12-15
Total Credits Required for Graduation = 121					

[†]The standard semester course load is five courses consisting of 15 – 17 credits. A student may take 18 credits if a lab puts them over 17 credits (*for more information about credit loads, please see the college catalog*).

³CS 117 and CORE 178 form a learning community where students work on related projects in both classes. This combination is not required but is highly recommended.