

MATHEMATICS

BACHELOR OF ARTS (BA.MATH)

CORE Requirements	Credits	Major Requirements	Credits	Major Requirements	Credits	Free Electives ²	Credits
CORE 090 First Year Exp.	1	MATH 127 ⁵	3	MATH Track**	3	Free Elective	3
CORE 100 Lib Arts Sem.	3	MATH 129 ⁵	4	MATH Track**	3	Free Elective	3
CORE 110 Effect Writ.	3	MATH 130	4	MATH Track**	3	Free Elective	3
CORE 115 or 116 Oral Comm.	3	MATH 231 ⁶	4	MATH Track**	3	Free Elective	3
CORE 131 or 133 Civilization	3	MATH 235 ⁶	3	MATH Track**	3	Free Elective	3
CORE 140 or 141-145 Forgn.	3	MATH 250	4			Free Elective	3
CORE 150-159 Soc. Sci. ³	3	MATH 367	3			Free Elective	3
CORE 160-169 Literature	3	MATH 425	3				
CORE 170-179 The Arts	3	MATH 490	1				
CORE 180-189 Amer. Studies ¹	3	CS 112	3				
CORE 190-199 Global Studies ¹	3	CS 1xx	3				
CORE 250-259 Syst. Theology	3	Science Group*	3				
CORE 260-269 Mor. Theology	3	Science Group*	3				
CORE 280 Philos. I	3						
CORE 281-289 Philos. II	3						
Total Credits for CORE	43	Total Credits for Major	56	Total Credits for Free Electives	21		

Total Credits Required for Graduation = 120

*All students majoring in Mathematics must take one of the Science Groups below (lab portion not required):

Science Group 1*	OR	Science Group 2*	OR	Science Group 3*
CHEM 113		PHYS 111		PHYS 113 (<i>Calculus based</i>)
CHEM 114		PHYS 112		PHYS 114 (<i>Calculus based</i>)

**In addition to the above, each B. A. Mathematics Major must complete one of the following three tracks:

MATH Track 1 Graduate School	MATH Track 2 Actuary Science, Industry, & Government	MATH Track 3 Secondary Education
Students must take five (5) math courses numbered 300 or higher. Typical options are:	Students must take five (5) math courses numbered 300 or higher. The following (5) courses are recommended	See program planner specifically designed for Math / Secondary Education
MATH 301 MATH 365 MATH 361 MATH 418 MATH 362 MATH 420 MATH 363 MATH 391/491	MATH 301 MATH 363 MATH 361 MATH 365 MATH 362	

¹ Students are required to take one of CORE 150, CORE 180, **OR** CORE 190 to fulfill the Interdisciplinary CORE requirement.

- If a student takes CORE 150, then he/she must choose one from 181 – 188 to fulfill the 18x requirement AND one from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 180, then he/she must choose one from 151 – 158 to fulfill the 15x requirement AND one from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 190, then he/she must choose one from 151 – 158 to fulfill the 15x requirement AND one from 181 – 188 to fulfill the 18x requirement.

² Students may select “free electives” for personal enrichment **OR** for Minor and/or Second Major Requirements.

³ CORE 153 is highly recommended for students on MATH Track 2. (See ¹ above.)

⁴ ECON 222 is recommended for students on MATH Track 2. MATH 362 substitutes for ECON 221 as course prerequisite.

⁵ Courses intended to be taken concurrently. Do not delay taking MATH 127.

⁶ Courses intended to be taken concurrently. Do not delay taking MATH 235.

⁷ MATH 238 is recommended for students on MATH Tracks 1 and 2.

⁸ Students contemplating MATH and CS double-majoring and with a high GPA may take CS 112 and CS 120 in their 1st year.

⁹ CS 100 may be substituted for CS 111.

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.”

MATHEMATICS

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 complete the course during the first semester at King's College.

1st Year – Fall		cr.	1st Year - Spring		cr.
	MATH 127 ⁵ Logic & Axiomatics	3		MATH 130 Analytic Geometry & Calculus II	4
	MATH 129 ⁵ Analytic Geometry & Calculus I	4		CS 111 ⁹ Programming for Sci. & Eng. or CORE	3
	CORE	3		CORE	3
	CORE	3		CORE	3
	CORE	3		CORE	3
	CORE 090 First Year Experience	1			
		17			16
2nd Year – Fall			2nd Year – Spring		
	MATH 231 ⁶ Analytic Geometry & Calculus III	4		MATH 250 Linear Algebra	4
	MATH 235 ⁶ Discrete Mathematics	3		Free Elective ^{2,4,7} or CORE	3
	CORE	3		CORE	3
	CS 112 ⁸ Intro. to Programming	3		CS 120 ⁸ OO Software Development or CORE	3
	Science Group*	3		Science Group*	3
		16			16
3rd Year – Fall			3rd Year – Spring		
	MATH 367 Real Analysis I	3		MATH 490 Junior Seminar	1
	MATH Track**	3		MATH Track**	3
	CORE	3		MATH Track**	3
	CORE	3		CORE	3
	Free Elective ^{2,4,7}	3		Free Elective ^{2,4,7}	3
		15			13
4th Year – Fall			4th Year – Spring		
	MATH 425 Abstract Algebra	3		MATH Track**	3
	MATH Track**	3		CORE or Free Elective ^{2,4,7}	3
	CORE	3		Free Elective ^{2,4,7}	3
	Free Elective ^{2,4,7}	3		Free Elective ^{2,4,7}	3
	Free Elective ^{2,4,7}	3			
		15			12
Total Credits Required for Graduation = 120					