

# MATHEMATICS / SECONDARY EDUCATION CERTIFICATION

## BACHELOR OF ARTS (B.A.)

CORE Requirements	Credits	Major Requirements	Credits	Major Requirements	Credits	Secondary Education	Credits
CORE 090 First Yr Exp.	1	MATH 127 <sup>5</sup>	3	MATH 236 <sup>3</sup>	3	EDUC 202	3
CORE 100 Lib Arts Sem.	3	MATH 129 <sup>5</sup>	4	MATH 361	3	EDUC 231	1
CORE 110 Effect Writ.	3	MATH 130	4	MATH 362	3	EDUC 232	1
CORE 115/116 Oral Com.	3	MATH 231 <sup>6</sup>	4	MATH Elective**	3	EDUC 235 <sup>2</sup>	3
CORE 131/133 Civilization	3	MATH 235 <sup>6</sup>	3			EDUC 240 <sup>2</sup>	3
CORE 140 or 141-145 Forgn.	3	MATH 250	4			EDUC 270	3
CORE 150-159 Soc. Sci. <sup>1</sup>	3	MATH 367	3			<b>EDUC 299<sup>4</sup></b>	<b>0</b>
CORE 160-169 Literature	3	MATH 425	3			EDUC 305 <sup>2,4</sup>	3
CORE 170-179 The Arts	3	MATH 490	1			EDUC 320 <sup>2,4</sup>	3
CORE 180-189 Amer. Studies <sup>1</sup>	3	CS 100 <sup>7</sup>	3			EDUC 350 <sup>2,4</sup>	3
CORE 190-199 Global Studies <sup>1</sup>	3	CS 116	3			EDUC 366 <sup>2,4</sup>	3
CORE 250-259 Syst. Theology	3	Science Group*	3			EDUC 440 <sup>4</sup>	3
CORE 260-269 Mor. Theology	3	Science Group*	3			EDUC 467 <sup>2,4</sup>	10
CORE 280 Philos. I	3					EDUC 468 <sup>2,4</sup>	2
CORE 281-289 Philos. II	3						
Total Credits for CORE	43			Total Credits for Major	53	Total Credits for Secondary Education	41

### Total Credits Required for Graduation = 137

\* 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> )

\*\* One additional Math Elective numbered 300 or Higher

MATH Electives		
MATH 301	MATH 363	MATH 418
MATH 361	MATH 365	MATH 420
MATH 362	MATH 391	MATH 491

<sup>1</sup> 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.

<sup>2</sup> Updated Child Abuse & Criminal Record & FBI Clearances **REQUIRED** for EDUC 235, EDUC 240, EDUC 320, EDUC 305, EDUC 350, EDUC 366, EDUC 467 and EDUC 468.

<sup>3</sup> MATH 236 offered spring semester even years only. Students should take this course during their 2<sup>nd</sup> or 3<sup>rd</sup> year.

<sup>4</sup> EDUC 299 Basic Skills is a pre-requisite for all 300 and 400 level education courses. In order to register for this course, you must take and pass all basic skills tests.

<sup>5</sup> Courses intended to be taken concurrently. Do not delay taking MATH 127.

<sup>6</sup> Courses intended to be taken concurrently. Do not delay taking MATH 235.

<sup>7</sup> CS 117 Fundamentals of Software Development II may be substituted for CS 100 Introduction to Computing.

### 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.

**Because of the CORE, Major, and Secondary Education requirements, there are no “Free Electives” for students majoring in Mathematics/Secondary Education.**

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## 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.

(Student Teaching in Spring Semester of Senior Year)			
1 <sup>st</sup> Year - Fall	cr.	1 <sup>st</sup> Year - Spring	cr.
MATH 127 <sup>5</sup> Logic & Axiomatics	3	MATH 130 Analytic Geometry & Calculus II	4
MATH 129 <sup>5</sup> Analytic Geometry & Calculus I	4	CS 100 <sup>7</sup> Introduction to Computing	3
CORE	3	CORE	3
CORE	3	CORE	3
CORE	3	CORE	3
CORE 090 First Year Experience	1		
	<b>17</b>		<b>16</b>
<b>Summer Session***</b>			
CORE	3		
2 <sup>nd</sup> Year - Fall		2 <sup>nd</sup> Year - Spring	
MATH 231 <sup>6</sup> Analytic Geometry & Calculus III	4	MATH 250 Linear Algebra	4
MATH 235 <sup>6</sup> Discrete Mathematics	3	MATH 236 <sup>3</sup> College Geometry or CORE	3
Science Group*	3	Science Group*	3
CS 116 Fund. of Software Development I	3	EDUC 202 Educ. Philos., Ethics, Issues & Trends	3
EDUC 235 <sup>2</sup> Sec. Development, Cognition, & Learn	3	EDUC 240 <sup>2</sup> Sec. Multicult., Linguistic & Inst. Meth.	3
EDUC 231 Technology Module I	1	<b>EDUC 299<sup>4</sup></b>	<b>0</b>
	<b>17</b>		<b>16</b>
<b>Admission to Candidacy</b> (Complete and return "Application for Teacher Education Program Candidacy" to Education Administrative Assistant no sooner than the completion of 48 credits and no later than 65 credits)			
<b>Summer Session***</b>			
CORE	3		
3 <sup>rd</sup> Year - Fall		3 <sup>rd</sup> Year - Spring	
MATH 367 Real Analysis I	3	MATH 490 Junior Seminar	1
MATH 361 Probability & Statistics I	3	MATH 236 <sup>3</sup> College Geometry or CORE	3
EDUC 270 Introduction to Special Education	3	MATH 362 Probability & Statistics II	3
EDUC 320 <sup>2,4</sup> Secondary Mathematics Methods or		EDUC 366 <sup>2,4</sup> Methods. For Teaching Diverse	
EDUC 305 Assessment I	3	Secondary Students	3
CORE/ MATH Elective**	3	EDUC 350 <sup>2,4</sup> Secondary Classroom Management	3
EDUC 232 Technology Module II	1	CORE / MATH Elective**	3
	<b>16</b>		<b>16</b>
4 <sup>th</sup> Year - Fall		4 <sup>th</sup> Year - Spring	
MATH 425 Abstract Algebra	3	EDUC 467 <sup>2,4</sup> Observation & Student Teach. (Sec.)	10
CORE / MATH Elective**	3	EDUC 468 <sup>2,4</sup> Student Teaching Seminar	2
EDUC 305 <sup>2,4</sup> Assessment I or EDUC 320 Secondary			
Mathematics Methods	3	EDUC 440 <sup>4</sup> Inclusive Education	3
CORE	3		
CORE	3		
CORE	3	<b>Take Praxis II</b>	
	<b>18</b>		<b>15</b>

**Total Credits Required for Graduation = 137**

**\*\*\* 6 credits during Summer Session are suggested in order to finish the degree in four years.**

**NOTE:** All Secondary Teacher Certification candidates must complete six credits of college level mathematics and six credits of college level English:

<b>Math Courses</b>	MATH 129	MATH 130
<b>English Courses</b>	CORE 110	CORE 160 - 169

The Pennsylvania Department of Education requires secondary teachers to have a degree in the content area for certification. Students seeking secondary certification must meet with his/her specific content area department for content area courses required for the degree. The Education Division is not responsible for content area or CORE courses for secondary certification candidates.