

# Mathematics / Secondary Education

## Bachelor of Arts (BA.MATH(SEC))

Core Requirements			Credits	Notes/Instructions
College Sem.	Quest for Meaning	CSEM 100	3	†A student may be required to take ENGL 105 and/or MATH 100 based on placement exams administered prior to their first semester at King's College. ENGL 105 and MATH 100 are 3-credit courses and will count as free electives. †† The Intercultural Competence requirement can be satisfied by taking a 100-level language class for 3 credits or participating in an approved Study Abroad experience. SBM = Satisfied By Major requirement(s) and credit(s) listed below.
Communication & Creative Expression	Writing	ENGL 110†	3	
	Oral Communication	COMM 101	3	
	Literature	ENGL 140-149	3	
	The Arts	ARTS 100-149	3	
Citizenship	History	HIST 100-149	3	
	Intercultural	FREN/GERM/SPAN 100-level or Study Abroad††	3	
	Global Connections	ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3	
Quantitative & Scientific Reasoning	SBM Quantitative Reasoning	MATH 120+ or higher level	-	
	SBM Scientific Endeavor	NSCI 100	-	
	SBM Science in Context	NSCI 171-199	-	
	Human Beh. & Soc. Inst	ECON 111, 112; GEOG 101, 102; PS 101, PSYC 101, SOC 101	3	
Wisdom, Faith, & the Good Life	Introduction to Phil.	PHIL 101	3	
	Phil. Investigations	PHIL 170-199; MSB 287	3	
	Theology & Wisdom	THEO 150-159	3	
	Theology & the Good Life	THEO 160-169	3	
<b>Total Core Credits</b>			<b>39</b>	

Major Requirements	Credits	Major Requirements	Credits	Secondary Education Requirements	Credits
MATH 127 <sup>2,5</sup>	3	CS 112	3	EDUC 202	3
MATH 129 <sup>5</sup>	4	CS 1xx	3	EDUC 231	1
MATH 130	4	Science Group <sup>2,*</sup>	3	EDUC 232	1
MATH 231 <sup>6</sup>	4	Science Group <sup>2,*</sup>	3	EDUC 235 <sup>3</sup>	3
MATH 235 <sup>6</sup>	3	MATH 236 <sup>3</sup>	3	EDUC 240 <sup>3</sup>	3
MATH 250	4	MATH 361	3	EDUC 270 <sup>3</sup>	3
MATH 367	3	MATH 362	3	<b>EDUC 299<sup>4</sup></b>	<b>0</b>
MATH 425	3	MATH Elective**	3	EDUC 305 <sup>3,4</sup>	3
MATH 490	1			EDUC 320 <sup>3,4</sup>	3
				EDUC 350 <sup>3,4</sup>	3
				EDUC 366 <sup>3,4</sup>	3
				EDUC 440 <sup>4</sup>	3
				EDUC 467 <sup>3,4</sup>	10
				EDUC 468 <sup>3,4</sup>	2
		<b>Other Requirements</b>			
		HCE 101 Holy Cross Exp.	1		
<b>Total Major Credits</b>		<b>Total Major and Other Credits</b>		<b>Total Secondary Education Credits</b>	
<b>29</b>		<b>25</b>		<b>41</b>	

**Total Credits Required for Graduation = 134**

\*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

**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>	ENGL 110	ENGL 140 - 149

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.

# Mathematics / Secondary Education

## Suggested Sequence

A suggested course sequence of degree requirements is listed below. Refer to the college catalog for course titles, descriptions, and prerequisites. Always consult your Academic Advisor when planning and scheduling your classes.

Fall 2019		Credits	Spring 2020		Credits
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 111 <sup>7</sup> Program. for Sci. & Engineering		3
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
HCE 101 Holy Cross Experience		1			
		<b>17</b>			<b>16</b>
Summer 2020***		Credits			
Core Course <sup>1</sup>		3			
		<b>3</b>			
Fall 2020		Credits	Spring 2021		Credits
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>8</sup> College Geometry or Core Course <sup>1</sup>		3
Science Group <sup>2,*</sup>		3	Science Group <sup>2,*</sup>		3
CS 112 <sup>8</sup> Intro. to Programming		3	EDUC 202 Educ. Philos., Ethics, Issues & Trends		3
EDUC 235 <sup>3</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)					
Summer 2021***		Credits			
Core Course <sup>1</sup>		3			
		<b>3</b>			
Fall 2021		Credits	Spring 2022		Credits
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 Course <sup>1</sup>		3
EDUC 270 <sup>3</sup> Introduction to Special Education		3	MATH 362 Probability & Statistics II		3
EDUC 305 <sup>3,4</sup> Assessment I <b>OR</b>			EDUC 366 <sup>3,4</sup> Methods For Teaching Diverse Learners		3
EDUC 320 <sup>3,4</sup> Secondary Mathematics Methods		3	EDUC 350 <sup>3,4</sup> Secondary Classroom Management		3
Core Course <sup>1</sup> / MATH Elective**		3	Core Course <sup>1</sup> / MATH Elective**		3
EDUC 232 Technology Module II		1			
		<b>16</b>			<b>16</b>
Summer 2022		Credits			
Fall 2022		Credits	Spring 2023		Credits
MATH 425 Abstract Algebra		3	EDUC 467 <sup>3,4</sup> Observation & Student Teach. (Sec.)		10
Core Course <sup>1</sup> / MATH Elective**		3	EDUC 468 <sup>3,4</sup> Student Teaching Seminar		2
EDUC 305 <sup>3,4</sup> Assessment I <b>OR</b>			EDUC 440 <sup>4</sup> Inclusive Education		3
EDUC 320 <sup>3,4</sup> Secondary Mathematics Methods		3			
Core Course <sup>1</sup>		3			
Core Course <sup>1</sup>		3			
		<b>15</b>		<b>Take Praxis II</b>	<b>15</b>
<b>Total Credits Required for Graduation = 134</b>					

### NOTES:

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

<sup>1</sup> Choose one course from each of the Core Requirements listed on the reverse side.

<sup>2</sup> Course may satisfy both a Major and a Core requirement.

<sup>3</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>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 100 or CS 120 may be substituted for CS 111.

<sup>8</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>PR</sup> Course has a prerequisite – check college catalog.