

# Mathematics - Business

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

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	-	
	SBM Human Beh. & Soc. Inst	ECON 111 <sup>3</sup> , 112; GEOG 101, 102; PS 101, PSYC 101, SOC 101	-	
Wisdom, Faith, & the Good Life	Introduction to Phil.	PHIL 101	3	
	Phil. Investigations <sup>3</sup>	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>36</b>	

Major Requirements	Credits	Major Requirements	Credits	Business Requirements	Credits
MATH 127 <sup>2,5</sup>	3	CS 112	3	ECON 111 <sup>2</sup>	3
MATH 129 <sup>5</sup>	4	CS 1xx	3	ECON 112	3
MATH 130	4	Science Group <sup>2,*</sup>	3	ECON 221 <sup>4</sup>	3
MATH 231 <sup>6</sup>	4	Science Group <sup>2,*</sup>	3	MSB 110	3
MATH 235 <sup>6</sup>	3	MATH Track <sup>**</sup>	3	MSB 120	3
MATH 250	4	MATH Track <sup>**</sup>	3	MSB 200	3
MATH 367	3	MATH Track <sup>**</sup>	3	MSB 210	3
MATH 425	3	MATH Track <sup>**</sup>	3	MSB 220	3
MATH 490	1	MATH Track <sup>**</sup>	3	Business Elective 1 <sup>7</sup>	3
				Business Elective 2 <sup>7</sup>	3
		<b>Other Requirements</b>			
		HCE 101 Holy Cross Exp.	1		
<b>Total Major Credits</b>		<b>Total Major and Other Credits</b>		<b>Total Elective / Other Credits</b>	
<b>29</b>		<b>28</b>		<b>30</b>	

**Total Credits Required for Graduation = 123**

\*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 Mathematics Major must complete one of the following two tracks:

MATH Track 1 Graduate School		MATH Track 2 Actuary Science, Industry, and Government	
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	
MATH 301	MATH 365	MATH 301	MATH 363
MATH 361	MATH 418	MATH 361	MATH 365
MATH 362	MATH 420	MATH 362	
MATH 363	MATH 391/491		

# Mathematics – Business

## 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>2,5</sup> Logic & Axiomatics		3	MATH 130 Analytic Geometry & Calculus II		4
MATH 129 <sup>5</sup> Analytic Geometry & Calculus I		4	MSB 120 Intro. to Management Acct. & Plan.		3
MSB 110 Intro. To Financial Accounting		3	ECON 112 Intro to Microeconomics		3
ECON 111 <sup>2</sup> Intro to Macroeconomics		3	CS 111 <sup>8</sup> Program. for Sci. & Eng. or 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			
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	ECON 221 <sup>4</sup> Quantitative Methods for Bus. & Econ.		3
CS 112 Intro. to Programming		3	CS 120 OO Software Development or Core Course <sup>1</sup>		3
Science Group <sup>2,*</sup>		3	Science Group <sup>2,*</sup>		3
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
		<b>16</b>			<b>16</b>
Summer 2021		Credits			
Fall 2021		Credits	Spring 2022		Credits
MATH 367 Real Analysis I		3	MATH 490 Junior Seminar		1
MATH Track <sup>**</sup>		3	MATH Track <sup>**</sup>		3
MSB 200 Principles of Management		3	MATH Track <sup>**</sup>		3
Core Course <sup>1</sup>		3	MSB 210 Principles of Marketing		3
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
		<b>15</b>	Core Course <sup>1</sup>		3
Summer 2022		Credits			
Fall 2022		Credits	Spring 2023		Credits
MATH 425 Abstract Algebra		3	MATH Track <sup>**</sup>		3
MATH Track <sup>**</sup>		3	Business Elective 2 <sup>7</sup>		3
MSB 220 Financial Management		3	Core Course <sup>1</sup>		3
Business Elective 1 <sup>7</sup>		3	Core Course <sup>1</sup>		3
Core Course <sup>1</sup>		3	Core Course <sup>1</sup>		3
		<b>15</b>			<b>15</b>
<b>Total Credits Required for Graduation = 123</b>					

### NOTES:

<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>Students are encouraged to take either MSB 287 – Business Ethics to fulfill the Philosophical Investigation Core requirement.

<sup>4</sup>MATH 362- Statistics may be substituted for ECON 221

<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>Mathematics students are encouraged to pursue the following Fall/Spring course sequences to fulfill the Business Elective 1 and 2 requirements:

- Technology Management: BUS 363 – Operations Management and BUS 435 – Innovation, Technology & Entrepreneurship
- Operations Management: MKT 385 – Supply Chain Management and BUS 363 – Operations Management
- Accounting: ACCT 115/L – Introduction to Financial Accounting II w/ Lab and ACCT 301 (or ACCT 240) – Intermediate Accounting I

<sup>8</sup>CS 100 may be substituted for CS 111.

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