

# MATHEMATICS – BUSINESS

## BACHELOR OF SCIENCE (B.S.)

CORE Requirements	Credits	Mathematics Requirements	Credits	Business Requirements	Credits
CORE 090 First Yr Exp.	1	MATH 127 <sup>5</sup> Logic & Axiomatics	3	ECON 112 Micro Economics	3
CORE 100 Lib Arts Sem.	3	MATH 129 <sup>5</sup> Analytic Geo & Calc I	4	ECON 221 Quant. Meth.for Bus.&Econ <sup>4</sup>	3
CORE 110 Effect Writ.	3	MATH 130 Analytic Geo & Calc II	4	MSB 110 Intro to Financial Reporting	3
CORE 115 or 116 Oral Comm.	3	MATH 231 <sup>6</sup> Analytic Geo & Calc III	4	MSB 120 Intro to Mgmt Control & Plan	3
CORE 131 or 133 Civilization	3	MATH 235 <sup>6</sup> Discrete Mathematics	3	MSB 200 Principles of Management	3
CORE 140 or 141-145 Forgn.	3	MATH 250 Linear Algebra	4	MSB 210 Principles of Marketing	3
CORE 153 Macro Econ	3	MATH 367 Real Analysis I	3	MSB 220 (or 320) Financial Management	3
CORE 160-164 Literature	3	MATH 425 Abstract Algebra	3	Business Elective 17	3
CORE 170-179 The Arts	3	MATH 490 Junior Seminar	1	Business Elective 27	3
CORE 180-189 Amer. Studies <sup>1</sup>	3	MATH Track**	3		
CORE 190-199 Global Stud. <sup>1,2</sup>	3	MATH Track**	3		
CORE 250-259 Syst. Theology	3	MATH Track**	3		
CORE 260-269 Mor. Theology	3	MATH Track**	3		
CORE 280 Philos. I	3	MATH Track**	3		
CORE 281-289 Philos. II <sup>3</sup>	3	MATH Track**/Elective	(3)		
	3	CS 116 with 116L (Lab)	3		
	3	CS 117 with 117L (Lab) <b>or</b> CS 100	3		
		Science Group*	3		
		Science Group*	3		
	<b>43</b>		<b>56-59</b>		<b>27</b>

**Total Credits = 126 – 129**

\*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 three tracks:

MATH Track 1 Graduate School	MATH Track 2 Actuary Science, Industry, & Government
Students must take five (5) out of the seven (7) mathematics electives listed below. These courses must be numbered 361 or higher and are usually taken in the junior and senior years.	Students must take the following six (6) mathematics courses, usually take in the junior and senior years.
MATH 361                      MATH 418 MATH 362                      MATH 420 MATH 363                      MATH 491 MATH 365	MATH 301                      MATH 363 MATH 361                      MATH 365 MATH 362                      MATH 418, 420, <b>or</b> 491

<sup>1</sup>Since CORE 153 is a requirement, students are required to take one of CORE 180 OR CORE 190 to fulfill the Interdisciplinary CORE requirement.

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

<sup>2</sup>Students are encouraged to take CORE 193 – Globalization to fulfill the Global Studies requirement.

<sup>3</sup>Students are encouraged to take either MSB 287 – Business Ethics, CORE 284 – Environmental Ethics, or CORE 288 – Bioethics to fulfill the Philosophy II 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

# MATHEMATICS – BUSINESS

## 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.

<b>1<sup>st</sup> Year - Fall</b>		<b>cr.</b>	<b>1<sup>st</sup> Year - Spring</b>		<b>cr.</b>
_____	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	_____	MSB 120 Intro. to Management Acct. & Plan.	3
_____	MSB 110 Intro. To Financial Accounting	3	_____	ECON 112 Micro Economics	3
_____	CORE 153 Macro Economics	3	_____	CS 100 Intro to Computing or CORE	3
_____	CORE	3	_____	CORE	3
_____	CORE 090 First Year Exp.	1			
		<b>17</b>			<b>16</b>
<b>2<sup>nd</sup> Year - Fall</b>			<b>2<sup>nd</sup> Year - Spring</b>		
_____	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 Business Statistics	3
_____	CS 116 Fund. of Soft. Dev. I with CS 116L Lab	3	_____	CORE	3
_____	Science Group*	3	_____	Science Group*	3
_____	CORE	3	_____	CS 117 Fund. of Soft. Dev. II with CS 117L Lab or CS 100 Intro to Computing or CORE	3
		<b>16</b>			<b>16</b>
<b>3<sup>rd</sup> Year - Fall</b>			<b>3<sup>rd</sup> Year - Spring</b>		
_____	MATH 367 Real Analysis I	3	_____	MATH 490 Junior Seminar	1
_____	MATH Track**	3	_____	MATH Track**	3
_____	MSB 200 Principles of Management	3	_____	MATH Track**	3
_____	CORE	3	_____	MSB 210 Principles of Marketing	3
_____	CORE	3	_____	CORE	3
_____	CORE	3	_____	CORE	3
		<b>18</b>			<b>16</b>
<b>4<sup>th</sup> Year - Fall</b>			<b>4<sup>th</sup> Year - Spring</b>		
_____	MATH 425 Abstract Algebra	3	_____	MATH Track**	3
_____	MATH Track**	3	_____	MATH Track**/Elective	(3)
_____	MSB 320 Financial Management	3	_____	Business Elective 2 <sup>7</sup>	3
_____	Business Elective 1 <sup>7</sup>	3	_____	CORE	3
_____	CORE	3	_____	CORE	3
		<b>15</b>			<b>12-15</b>

**Total Credits Required for Graduation= 126 – 129**

\*\* Students must take a 6<sup>th</sup> mathematics course for the Math Track 2