# **Mathematics - Business**

Bachelor of Arts (BA.MATH(BUS))

<b>Core Requir</b>	ements		Credits	Notes/Instructions
College Sem.	Quest for Meaning	CSEM 100	3	†A student may be
Communication & Creative Expression	Writing Oral Communication Literature The Arts	ENGL 110 <sup>†</sup> COMM 101 ENGL 140-149 ARTS 100-149	3 3 3 3	required to take ENGL 105 and/or MATH 100 based on placement exams administered prior to their first semester at King's
Citizenship	History Intercultural Global Connections	HIST 100-149 FREN/GERM/SPAN 100-level or Study Abroad†† ECON 150-199; GEOG 150-199; HIST 150-199; PS 150-199; SOC 150-199	3 3 3	College. ENGL 105 and MATH 100 are 3-credit courses and will count a free electives.
Quantitative & Scientific Reasoning	SBM   Quantitative Reasoning     SBM   Scientific Endeavor     SBM   Science in Context     SBM   Human Beh. & Soc. Inst	MATH 120 <sup>†</sup> or higher level NSCI 100 NSCI 171-199 <b>ECON 111<sup>2</sup></b> , 112; GEOG 101, 102; PS 101, PSYC 101, SOC 101	- - - -	Competence requirement can be satisfied by taking a 10 level language class for credits or participating an approved Study
Wisdom, Faith, & the Good Life	Introduction to Phil. Phil. Investigations <sup>3</sup> Theology & Wisdom Theology & the Good Life	PHIL 101 PHIL 170-199; <b>MSB 287</b> <sup>3</sup> THEO 150-159 THEO 160-169	3 3 3 3	Abroad experience. <b>SBM</b> = Satisfied By Maji requirement(s) and credit(s) listed below.
		Total Core Credits	36	

#### Major Major **Business** Credits Credits Credits **Requirements** Requirements Requirements MATH 127<sup>2,5</sup> 3 CS 112 3 ECON 111<sup>2</sup> 3 ECON 112 MATH 1295 4 CS 1xx 3 3 MATH 130 ECON 2214 4 Science Group<sup>2,\*</sup> 3 3 MATH 231<sup>6</sup> 4 Science Group<sup>2,\*</sup> 3 MSB 110 3 MATH 2356 3 MATH Track\*\* 3 MSB 120 3 **MATH 250** 4 MATH Track\*\* 3 MSB 200 3 **MATH 367** 3 MATH Track\*\* 3 MSB 210 3 MATH Track\*\* **MATH 425** 3 3 MSB 220 3 **MATH 490** 1 MATH Track\*\* 3 Business Elective 17 3 Business Elective 27 3 **Other Requirements** HCE 101 Holy Cross Exp. 1 **Total Elective / Total Major and Total Major Credits** 29 **Other Credits** 28 **Other Credits** 30

### **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*		Science Group 2*		Science Group 3*
CHEM 113	OR	PHYS 111	OR	PHYS 113 (Calculus based)
CHEM 114		PHYS 112		PHYS 114 (Calculus based)

\*\*In addition to the above, each Mathematics Major must complete one of the following two tracks:

	l Track 1 Ite School		Track 2 stry, and Government
Students must take five (5) math	n courses numbered 300 or higher.	Students must take five (5) math	courses numbered 300 or higher.
Typical c	options are:	The following (5) cour	ses 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	Credits	Spring	Credits
MATH 127 <sup>2,5</sup> Logic & Axiomatics	3	MATH 130 Analytic Geometry & Calculus II	4
MATH 129 <sup>5</sup> Analytic Geometry & Calculu	us l 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		•
	17		16
Summer	Credits		
Fall	Credits	Spring	Credits
MATH 231 <sup>6</sup> Analytic Geometry & Calculu	ıs     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
			0
	16		16
Summer	Credits		
			<b>a</b> 11
Fall	Credits	Spring	Credits
MATH 367 Real Analysis I	3	MATH 490 Junior Seminar	1
MATH 367 Real Analysis I MATH Track**	3 3	MATH 490 Junior Seminar MATH Track**	1 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management	3 3	MATH 490 Junior Seminar MATH Track** MATH Track**	1 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup>	33 33	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing	1 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management	3 3	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup>	1 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup>	33 33	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing	1 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup>	3 3 3 3	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup>	1 3 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup>	33 33 3 15	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup>	1 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup>	3 3 3 3	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup>	1 3 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup>	33 33 3 15	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup>	1 3 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup>	33 33 3 15	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup>	1 3 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup>	33 33 3 15	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup>	1 3 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup>	3 - 3 - 3 - 3 - 3 - 3 - - - - 15 Credits	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup>	1 3 3 3 3 3 <b>16</b>
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup> Summer Fall MATH 425 Abstract Algebra MATH Track**	3 - 3 - 3 - 3 - 3 - - 3 - - 15 Credits Credits 3 - 3 - - - - - - - - - - - - - -	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup> Spring MATH Track** Business Elective 2 <sup>7</sup>	1 3 3 3 3 3 16 Credits 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup> Summer Fall MATH 425 Abstract Algebra	3 - 3 - 3 - 3 - 3 - 3 - - - 15 Credits Credits 3 -	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup> Spring MATH Track**	1 3 3 3 3 3 16 Credits 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup> Summer Fall MATH 425 Abstract Algebra MATH Track**	3 - 3 - 3 - 3 - 3 - - 3 - - 15 Credits Credits 3 - 3 - - - - - - - - - - - - - -	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup> Spring MATH Track** Business Elective 2 <sup>7</sup>	1 3 3 3 3 3 16 Credits 3 3
MATH 367 Real Analysis I   MATH Track**   MSB 200 Principles of Management   Core Course1   Core Course1   Summer   MATH 425 Abstract Algebra   MATH Track**   MATH 322 Pinancial Management	3 - 3 - 3 - 3 - 3 - 3 - - 15 Credits Credits 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup> MATH Track** Business Elective 2 <sup>7</sup> Core Course <sup>1</sup>	1 3 3 3 3 3 16 Credits 3 3 3 3
MATH 367 Real Analysis I   MATH Track**   MSB 200 Principles of Management   Core Course1   Core Course1   Summer   MATH 425 Abstract Algebra   MATH Track**   MSB 220 Financial Management   Business Elective 1 <sup>7</sup>	3	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup> MATH Track** Business Elective 2 <sup>7</sup> Core Course <sup>1</sup> Core Course <sup>1</sup>	1 3 3 3 3 3 16 Credits 3 3 3 3 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup> Summer Fall MATH 425 Abstract Algebra MATH Track** MSB 220 Financial Management Business Elective 1 <sup>7</sup>	3	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup> MATH Track** Business Elective 2 <sup>7</sup> Core Course <sup>1</sup> Core Course <sup>1</sup>	1 3 3 3 3 3 16 Credits 3 3 3 3 3 3
MATH 367 Real Analysis I   MATH Track**   MSB 200 Principles of Management   Core Course1   Core Course1   Summer   MATH 425 Abstract Algebra   MATH Track**   MSB 220 Financial Management   Business Elective 1 <sup>7</sup>	3	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup> MATH Track** Business Elective 2 <sup>7</sup> Core Course <sup>1</sup> Core Course <sup>1</sup>	1 3 3 3 3 3 16 Credits 3 3 3 3 3 3 3 3
MATH 367 Real Analysis I MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup> Summer Fall MATH 425 Abstract Algebra MATH Track** MSB 220 Financial Management Business Elective 1 <sup>7</sup>	3	MATH 490 Junior Seminar MATH Track** MATH Track** MSB 210 Principles of Marketing Core Course <sup>1</sup> Core Course <sup>1</sup> MATH Track** Business Elective 2 <sup>7</sup> Core Course <sup>1</sup> Core Course <sup>1</sup> Core Course <sup>1</sup> Core Course <sup>1</sup>	1 3 3 3 3 3 16 Credits 3 3 3 3 3 3 3 3

#### 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 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.

PR Course has a prerequisite – check college catalog.