# **Mathematics - Business**

Bachelor of Arts (BS.MATH(BUS))

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

Major Requirements	Credits	Major Reguirements	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 111 or CS 120	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**	3	MSB 120	3
MATH 250	4	MATH Track**	3	MSB 200	3
MATH 367	3	MATH Track**	3	MSB 210	3
MATH 425	3	MATH Track**	3	MSB 220	3
MATH 490	1	MATH Track**	3	Business Elective 1 <sup>7</sup>	3
<del>_</del>	_		_	Business Elective 2 <sup>7</sup>	3
		Other Requirements			
	_	HCE 101 Holy Cross Exp.	1		
		Total Major and		Total Elective /	
<b>Total Major Credits</b>	29	Other Credits	28	Other Credits	30

## **Total Credits Required for Graduation = 123**

<sup>\*</sup>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)

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

	Track 1 e School	MATH Actuary Science, Indu	·····
• • •	courses numbered 300 or higher. otions are:	Students must take five (5) math The following (5) cour	courses numbered 300 or higher. 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	Credi
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 Accounting & Planning	3
MSB 110 Intro. To Financial Accounting	3	ECON 112 Intro to Microeconomics	3
ECON 111 <sup>2</sup> Intro to Macroeconomics	3	CS 1118 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	Cred
MATH 231 <sup>6</sup> Analytic Geometry & Calculus III	4	Spring MATH 250 Linear Algebra	Cred 4
MATH 2356 Discrete Mathematics	3	ECON 221 <sup>4</sup> Statistics & Predictive Analytics	3
CS 112 Intro. to Programming	3 <u> </u>	CS 1118 Program. for Sci. & Eng. or CS 120 OO	3
Science Group <sup>2,*</sup>	3	Software Development or Core Course <sup>1</sup>	3
Core Course <sup>1</sup>	3 <u> </u>	Science Group <sup>2,*</sup>	3
Core Course		Core Course <sup>1</sup>	3
	16	Core course	10
Summer	Credits	Spring	Cro
Fall	Credits  Credits	Spring	Cre
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra	Credits Credits	MATH 490 Junior Seminar	1
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**	Credits  Credits  3 3	MATH 490 Junior Seminar  MATH Track**	1
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management	Credits  3 3 3	MATH 490 Junior Seminar  MATH Track**  MATH Track**	1 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management  Core Course <sup>1</sup>	Credits  3 3 3 3 3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing	1 3 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management	Credits  3 3 3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹	1 3 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management  Core Course <sup>1</sup>	Credits  3 3 3 3 3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing	Crec 1 3 3 3 3 3 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management  Core Course <sup>1</sup> Core Course <sup>1</sup>	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹	1 3 3 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management  Core Course <sup>1</sup>	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹	1 3 3 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management  Core Course <sup>1</sup> Core Course <sup>1</sup>	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹	1 3 3 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management  Core Course <sup>1</sup> Core Course <sup>1</sup> Summer	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹  Core Course¹  Spring	1 3 3 3 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra MATH Track** MSB 200 Principles of Management Core Course <sup>1</sup> Core Course <sup>1</sup> Summer  Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹  Core Course¹  Spring  MATH Track**	1 3 3 3
Fall  MATH 367 <sup>9</sup> Real Analysis I OR MATH 425 <sup>9</sup> Abstract Algebra  MATH Track**  MSB 200 Principles of Management  Core Course <sup>1</sup> Core Course <sup>1</sup> Summer	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹  Core Course¹  Spring	1 3 3 3 3 1 1 Cree
Fall  MATH 3679 Real Analysis I OR MATH 4259 Abstract Algebra MATH Track**  MSB 200 Principles of Management Core Course1 Core Course1  Summer  Fall  MATH 3679 Real Analysis I OR MATH 4259 Abstract Algebra MATH Track**  MSB 220 Financial Management	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹  Core Course¹  Spring  MATH Track**  Business Elective 27  Core Course¹	11 3 3 3 3 10 Crec 3 3 3
Fall  MATH 3679 Real Analysis I OR MATH 4259 Abstract Algebra MATH Track**  MSB 200 Principles of Management Core Course1  Core Course1  Summer  Fall  MATH 3679 Real Analysis I OR MATH 4259 Abstract Algebra MATH Track**  MSB 220 Financial Management Business Elective 17	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹  Core Course¹  Spring  MATH Track**  Business Elective 27  Core Course¹  Core Course¹  Core Course¹  Core Course¹	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Fall  MATH 3679 Real Analysis I OR MATH 4259 Abstract Algebra MATH Track**  MSB 200 Principles of Management Core Course1 Core Course1  Summer  Fall  MATH 3679 Real Analysis I OR MATH 4259 Abstract Algebra MATH Track**  MSB 220 Financial Management	Credits  3	MATH 490 Junior Seminar  MATH Track**  MATH Track**  MSB 210 Principles of Marketing  Core Course¹  Core Course¹  Spring  MATH Track**  Business Elective 27  Core Course¹	1 3 3 3 3 1 1 Crec

#### NOTES:

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

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/L Operations Management with Lab and BUS 435 Global Innovation, Technology & Entrepreneurship
- Manufacturing & Operations Management: MKT 385 Global Supply Chain Management and BUS 363/L Operations Management with Lab
- Accounting: ACCT 240/L Intermediate Account I w/ Lab and ACCT 301 Intermediate Accounting II

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

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

<sup>&</sup>lt;sup>3</sup> Students are encouraged to take MSB 287 – Business Ethics to fulfill the Philosophical Investigation Core requirement.

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

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

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

<sup>&</sup>lt;sup>9</sup> MATH 367 is offered fall semesters odd years only and MATH 425 is offered fall semesters even years only.

PR Course has a prerequisite – check college catalog.