# **Mathematics - General Studies in Mathematics**

## Major Requirements

Lower Division Requirements	Pre-Req	Units	Note
CIS268 Computer Programming Languages	-	3	Spring only
MAT245 Analytical Geometry & Calculus I	MAT135 or 145	4	
MAT250 Modeling & Applications of Calculus	MAT245	2	Spring only
MAT255 Analytical Geometry & Calculus II	MAT245	4	
PHY214 Physics for Scientists I w/Lab	MAT245 & Exam	4	Fall only
PHY224 Physics for Scientists II w/Lab	PHY214	4	Spring only

Upper Division Requirements	Pre-Req	Units	Note
MAT313 Mathematical Proofs & Structures	MAT245	3	
MAT323 Modern Algebra	MAT313	4	Spring only
MAT343 Multivariable Calculus	MAT255	4	
MAT403 Linear Algebra	MAT313	3	Spring only
MAT413 Differential Equations	MAT255	3	
MAT443 Advanced Calculus	MAT313	3	Spring only

Concentration Requirements	Pre-Req	Units	Note
Complete 12 additional upper division units	Classes varv	Classes	See catalog
in Mathematics.	Classes vary	vary	See catalog

Total Major Units: \_\_\_\_53

Upper Division Major Units: 32

## General Education Requirements

Competency Requirements	Units	Note
English Competency	3	ENG113 required
Math Competency	3	MAT313* will fulfill
Technology	3	CIS268 will fulfill
Foreign Language I	3	
Foreign Language II	3	

If you are exempt from a Competency Requirement, add those units to Additional Elective Units Needed.

Core Curriculum	Units	Note
Behavioral Science	6	
English Composition	3	ENG123 required
English or Film	3	
Communication Arts	3	
Art or Music	3	
Philosophy	3	
US History	3	
Non-US History	3	
Political Science	3	
Lab Science	4	PHY214 will fulfill
Science or Kinesiology	4	PHY224 will fulfill
Christian Studies	9	

<sup>\*</sup>Course is interdisciplinary

Upper Division Requirements	12	
Multicultural Requirements	9	ENG123 will fulfill 3 units
Interdisciplinary Requirements	9	MAT313 will fulfill 3 units

Total Required GE units: 48

Upper Division Required GE Units: 12

Additional Elective Units Needed: 23

Upper Division Elective Units Needed: 0

#### About This Plan

- This plan is not a contract. Curriculum can be subject to change.
- · Highlighted courses and fields are major specific.
- Descriptions for all courses can be found in the CBU catalog at insidecbu.calbaptist.edu.
- To graduate, all students need 124 total units, 39 of which must be upper division.
- Courses numbered in the 300's and 400's are upper division.
- · GST100, ENG103, and MAT095 count as elective units.

#### **Contact Information**

Department of Natural & Mathematical S	ciences
(951) 343 - 4380	James 244
Dr. Lisa Hernandez, Chair	lihernandez@calbaptist.edu
Debbie Spala, Department Secretary	dspala@calbaptist.edu
Office of Academic Advising	Yeager B150
(951) 343 - 4567	advising@calbaptist.edu



F-11 C		Freshman Year		Comment Comment	E-II C		Sophomore Yea	r	S S 4
Fall Semester		Spring Semester		Summer Semester	Fall Semester		Spring Semester		Summer Semester
MAT245 Analytical Geometry & Calculus I	4	CIS268 Computer Programming Languages	3		MAT313 Mathematical Proofs & Structures	3	MAT343 Multivariable Calculus	4	
CIS265 Information Systems Essentials	3	MAT250 Modeling & Applications of Calculus	2		PHY214 Physics for Scientists I w/Lab	4	PHY224 Physics for Scientists II w/Lab	4	
ENG113 Composition	3	MAT255 Analytical Geometry & Calculus II	4		General Education Course	3	Upper Division General Education Course	3	
GST100 Focus	1	ENG123 Intermediate Composition	3		General Education Course	3	General Education Course	3	
General Education Course	3	General Education Course	3		General Education Course	3	Elective	1	
		Elective	1						
						1	(		
						-			
Total Units:	14	Total Units:	16	Total Units:	Total Units:	16	Total Units:	15	Total Units:
2	1	Junior Year	1				Senior Year		
<b>Fall Semester</b>				Summer Semester	Fall Semester				
		Spring Semester		Summer Semester	r an Semester		Spring Semester		Summer Semester
MAT413 Differential Equations	3	Spring Semester  MAT323 Modern Algebra	4	Summer Semester	Upper Division Math Course	3	Spring Semester  MAT443 Advanced Calculus	3	Summer Semester
			3	Summer Semester		$\vdash$	MAT443 Advanced		Summer Semester
Equations		MAT323 Modern Algebra	3 3	Summer Semester	Upper Division Math Course	$\vdash$	MAT443 Advanced Calculus		Summer Semester
Equations Upper Division Math Course Upper Division General	3	MAT323 Modern Algebra  MAT403 Linear Algebra  Upper Division General		Summer Semester	Upper Division Math Course Upper Division Math Course Upper Division General	3	MAT443 Advanced Calculus Upper Division Math Course	e 3	Summer Semester
Equations  Upper Division Math Course  Upper Division General Education Course	3	MAT323 Modern Algebra  MAT403 Linear Algebra  Upper Division General Education Course	3	Summer Semester	Upper Division Math Course Upper Division Math Course Upper Division General Education Course	3	MAT443 Advanced Calculus Upper Division Math Course General Education Course	e 3	Summer Semester
Equations  Upper Division Math Course  Upper Division General  Education Course  General Education Course	3 3	MAT323 Modern Algebra  MAT403 Linear Algebra  Upper Division General Education Course  General Education Course	3		Upper Division Math Course Upper Division Math Course Upper Division General Education Course Elective	3 3	MAT443 Advanced Calculus  Upper Division Math Course  General Education Course  Elective	3 3	Summer Semester
Equations  Upper Division Math Course  Upper Division General  Education Course  General Education Course  General Education Course	3 3	MAT323 Modern Algebra  MAT403 Linear Algebra  Upper Division General Education Course  General Education Course	3		Upper Division Math Course  Upper Division Math Course  Upper Division General  Education Course  Elective  Elective	3 3	MAT443 Advanced Calculus  Upper Division Math Course  General Education Course  Elective	3 3	Summer Semester
Equations  Upper Division Math Course  Upper Division General  Education Course  General Education Course  General Education Course	3 3	MAT323 Modern Algebra  MAT403 Linear Algebra  Upper Division General Education Course  General Education Course	3		Upper Division Math Course  Upper Division Math Course  Upper Division General  Education Course  Elective  Elective	3 3	MAT443 Advanced Calculus  Upper Division Math Course  General Education Course  Elective	3 3	Summer Semester
Equations  Upper Division Math Course  Upper Division General  Education Course  General Education Course  General Education Course	3 3	MAT323 Modern Algebra  MAT403 Linear Algebra  Upper Division General Education Course  General Education Course	3		Upper Division Math Course  Upper Division Math Course  Upper Division General  Education Course  Elective  Elective	3 3	MAT443 Advanced Calculus  Upper Division Math Course  General Education Course  Elective	3 3	Summer Semester

Total Units: 124 (124 units required to graduate)