

# **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	Fall only
MAT323 Modern Algebra	MAT313	4	Spring only (even years)
MAT343 Multivariable Calculus	MAT255	4	
MAT403 Linear Algebra	MAT313	3	Spring only (even years)
MAT413 Differential Equations	MAT255	3	Spring only
MAT443 Advanced Calculus	MAT313	3	Spring only (odd years)

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	
Interdisciplinary Requirements	9	MAT313 will fulfill 3 units
Multicultural Requirements	9	ENG123 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 www.calbaptist.edu/about/universitycatalogs.aspx.
- 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**

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Fall Semester		Freshman Year Spring Semester		Summer Semester	Fall Semester		Sophomore Year Spring Semester	•	Summer Semester
Geometry & Calculus I	4	CIS268 Computer Programming Languages	3		MAT313 Mathematical Proofs & Structures	3	MAT343 or MAT323 (depending on year)	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						
						-	)		
						7			
Total Units: 1	14	Total Units:	16	Total Units:	Total Units:	16	Total Units:	15	Total Units:
2	1	Junior Year	1				Senior Year		
Fall Semester	1	<b>Spring Semester</b>	1	Summer Semester	Fall Semester		Spring Semester		Summer Semester
Upper Division Math Course	3	Spring Semester MAT323 or MAT343 (depending on year)	4	Summer Semester	Fall Semester Upper Division Math Course	3		3	Summer Semester
Upper Division Math Course Upper Division General Education Course	3	Spring Semester  MAT323 or MAT343 (depending on year)  MAT413 Differential Equations	4 3	Summer Semester	Upper Division Math Course Upper Division Math Course		Spring Semester MAT443 or MAT403		Summer Semester
Upper Division Math Course Upper Division General Education Course Upper Division General		Spring Semester  MAT323 or MAT343 (depending on year)  MAT413 Differential		Summer Semester	Upper Division Math Course		Spring Semester MAT443 or MAT403 (depending on year)		Summer Semester
Upper Division Math Course Upper Division General Education Course Upper Division General Education Course	3	Spring Semester  MAT323 or MAT343 (depending on year)  MAT413 Differential Equations  MAT403 or MAT443	3	Summer Semester	Upper Division Math Course Upper Division Math Course Upper Division General	3	Spring Semester MAT443 or MAT403 (depending on year) Upper Division Math Course	3	Summer Semester
Upper Division Math Course Upper Division General Education Course Upper Division General Education Course General Education Course	3	Spring Semester  MAT323 or MAT343 (depending on year)  MAT413 Differential Equations  MAT403 or MAT443 (depending on year)	3	Summer Semester	Upper Division Math Course Upper Division Math Course Upper Division General Education Course	3	Spring Semester MAT443 or MAT403 (depending on year) Upper Division Math Course General Education Course	3	Summer Semester
Upper Division Math Course Upper Division General Education Course Upper Division General Education Course General Education Course	3 3	Spring Semester  MAT323 or MAT343 (depending on year)  MAT413 Differential Equations  MAT403 or MAT443 (depending on year)  General Education Course	3 3	Summer Semester	Upper Division Math Course Upper Division Math Course Upper Division General Education Course Elective	3 3	Spring Semester MAT443 or MAT403 (depending on year) Upper Division Math Course General Education Course Elective	3 3	Summer Semester
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Total Units: 124 (124 units required to graduate)