

# Foundational Mathematics (if taking PHY214 & PHY224)

## Major Requirements

Lower Division Requirements	Pre-Req	Units	Note
MAT101 Orientation to the Discipline	-	1	Spring only
MAT125 Mathematics Concepts & Applications I	MAT115	3	Fall only
MAT127 Mathematics Concepts & Applications II	MAT125	3	Spring only
MAT135 Pre-Calculus	MAT115	3	
MAT245 Analyitcal Geometry & Calculus I	MAT135 or 145	4	
MAT250 Modeling & Applications of Calculus	MAT245	2	Spring only
MAT255 Analytical Geometry & Calculus II	MAT245	4	

Upper Division Requirements	Pre-Req	Units	Note
EDU300 American Public Schools	-	3	Certificate of Clearance required
EDU302 Growth, Development & Learning	-	3	Certificate of Clearance required
EDU341 The Exceptional Child	-	3	Certificate of Clearance required
ETC305 Educational Computing	-	3	
MAT313 Mathematical Proofs & Structures	MAT245	3	Fall only
MAT353 Probability & Statistics	MAT245	3	Fall only (even years)
MAT363 History of Math & Theory of Numbers	Pre or Co: MAT313	3	Fall only (odd years)
MAT403 Linear Algebra	MAT313	3	Spring only (even years)
MAT463 Fundamental Concepts of Geometry	MAT313	3	Spring only (odd years)
MAT499 Capstone	-	4	Chair consent needed

Elective Requirements	Pre-Req	Units	Note	
Complete a set of two courses from the following:				
MAT343 Multivariable Calculus	MAT255	4		
and MAT443 Advanced Calculus	MAT313	3	Spring only (odd years)	
PHY214 Physics for Scientists I w/Lab	MAT245 & Exam	4	Fall only	
and PHY224 Physics for Scientists II w/Lab	PHY214	4	Spring only	

Total Major Units:	59
<b>Upper Division Major Units:</b>	31

#### 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.

#### General Education Requirements

<b>Competency Requirements</b>	Units	Note
English Competency	3	ENG113 required
Math Competency	3	MAT363* will fulfill
Technology	3	ETC305* 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	ETC305 & MAT363 will fulfill 6 units
Multicultural Requirements	9	ENG123 & MAT363 will fulfill 6 units

<b>Total Required GE units:</b>	48
<b>Upper Division Required GE Units:</b>	12

<b>Additional Elective Units Needed:</b>	17

#### **Upper Division Elective Units Needed:** 0

### **Contact Information**

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# Cbu Foundational Mathematics (if taking PHY214 & PHY224)

		Freshman Year					Sophomore Year	•	
Fall Semester		<b>Spring Semester</b>		<b>Summer Semester</b>	Fall Semester		<b>Spring Semester</b>		<b>Summer Semester</b>
MAT125 Mathematics Concepts & Applications I	3	MAT101 Orientation to the Discipline	1		Schols	3	MAT250 Modeling & Applications of Calculus	2	
ENG113 Composition	3	MAT127 Mathematics Concepts & Applications II	3		Geometry & Calculus I	4	MAT255 Analytical Geometry & Calculus II Upper Division General	4	
GST100 Focus	1	MAT135 Pre-Calculus	3		Education Course	3	Education Course	3	
General Education Course	3	ENG123 Intermediate Composition	3		General Education Course 3	3	General Education Course	3	
General Education Course	3	General Education Course	3		General Education Course 3	3	General Education Course	3	
General Education Course	3	General Education Course	3						
			Ш						
Total Units:	16	Total Units:	16	Total Units:	Total Units: 1	16	Total Units:	15	Total Units:
		Junior Year					Senior Year		
Fall Semester		Junior Year Spring Semester		Summer Semester	Fall Semester		Senior Year Spring Semester		Summer Semester
MAT313 Mathematical Proofs & Structures	3	Spring Semester EDU302 Growth, Development & Learning	3	Summer Semester	EDU341 The Exceptional Child	3		3	Summer Semester
MAT313 Mathematical Proofs & Structures MAT353 or MAT363 (depending on year)	3	Spring Semester EDU302 Growth, Development & Learning MAT403 or MAT463 (depending on year)	3	Summer Semester	EDU341 The Exceptional Child ETC305 Educational Computing	3	Spring Semester MAT403 or MAT463 (depending on year) MAT499 Capstone	3 4	Summer Semester
MAT313 Mathematical Proofs & Structures MAT353 or MAT363		Spring Semester EDU302 Growth, Development & Learning MAT403 or MAT463		Summer Semester	EDU341 The Exceptional Child ETC305 Educational Computing MAT353 or MAT363 (depending on year)		Spring Semester MAT403 or MAT463 (depending on year)		Summer Semester
MAT313 Mathematical Proofs & Structures MAT353 or MAT363 (depending on year) PHY214 Physics for	3	Spring Semester EDU302 Growth, Development & Learning MAT403 or MAT463 (depending on year) PHY224 Physics for	3	Summer Semester	EDU341 The Exceptional Child ETC305 Educational Computing MAT353 or MAT363 (depending on year) Linger Division General	3	Spring Semester MAT403 or MAT463 (depending on year) MAT499 Capstone Upper Division General	4	Summer Semester
MAT313 Mathematical Proofs & Structures MAT353 or MAT363 (depending on year) PHY214 Physics for Scientists I w/Lab	3 4	Spring Semester EDU302 Growth, Development & Learning MAT403 or MAT463 (depending on year) PHY224 Physics for Scientists II w/Lab	3	Summer Semester	EDU341 The Exceptional Child ETC305 Educational Computing MAT353 or MAT363 (depending on year) Upper Division General Education Course	3	Spring Semester MAT403 or MAT463 (depending on year) MAT499 Capstone Upper Division General Education Course	3	Summer Semester
MAT313 Mathematical Proofs & Structures MAT353 or MAT363 (depending on year) PHY214 Physics for Scientists I w/Lab Elective	3 4 3	Spring Semester EDU302 Growth, Development & Learning MAT403 or MAT463 (depending on year) PHY224 Physics for Scientists II w/Lab Elective	3 4 3	Summer Semester	EDU341 The Exceptional Child ETC305 Educational Computing MAT353 or MAT363 (depending on year) Upper Division General Education Course	3 3	Spring Semester  MAT403 or MAT463 (depending on year)  MAT499 Capstone  Upper Division General Education Course  Elective	3	Summer Semester
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Total Units: 124 (124 units required to graduate)