

Mathematics - Secondary Mathematics Education

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
MAT101 Orientation to the Discipline	-	1	Spring only
MAT333 Complex Variables	MAT313	3	Spring only (even years)
MAT353 Probability & Statistics	MAT245	3	Fall only
MAT363 History of Math & Theory of Numbers	Pre or Co: MAT313	3	Fall only
MAT463 Fundamental Concepts of Geometry	MAT313	3	Spring only
MAT499 Capstone	-	4	Dean's consent needed

Total Major Units: _____58

Upper Division Major Units: ____36

General Education Requirements

Competency Requirements	Units	Note
English Competency	3	ENG113 required
Math Competency	3	MAT363* 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	

*Course is interdisciplinary

Upper Division Requirements	12	
Multicultural Requirements	9	ENG123 & MAT363 will fulfill 6 units
Interdisciplinary Requirements	9	MAT363 will fulfill 3 units

Total Required GE units: 48

Upper Division Required GE Units: 12

Additional Elective Units Needed:	18
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

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Cbu Mathematics - Secondary Mathematics Education

Fall Semester		Freshman Year	C C	Fall Camagetan		Sophomore Year	r	Comment Comments
		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 & 2 Applications of Calculus		PHY214 Physics for Scientists I w/Lab	4	PHY224 Physics for Scientists II w/Lab	4	
ENG113 Composition	3	MAT255 Analytical Geometry & Calculus II		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						
Total Units:	14	Total Units: 16	Total Units:	Total Units:	16	Total Units:	15	Total Units:
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2	1	Junior Year				Senior Year		
Fall Semester	1		Summer Semester	Fall Semester				Summer Semester
Fall Semester MAT363 History of Math & Theory of Numbers	3	Spring Semester MAT101 Orientation to the	Summer Semester	Fall Semester MAT353 Probability & Statistics	3	Senior Year Spring Semester MAT443 Advanced Calculus	3	Summer Semester
MAT363 History of Math	3	Spring Semester	Summer Semester		3	Spring Semester MAT443 Advanced Calculus MAT463 or MAT333	3	Summer Semester
MAT363 History of Math & Theory of Numbers MAT413 Differential		Spring Semester MAT101 Orientation to the Discipline	Summer Semester	MAT353 Probability & Statistics Upper Division General		Spring Semester MAT443 Advanced Calculus	\blacksquare	Summer Semester
MAT363 History of Math & Theory of Numbers MAT413 Differential Equations Upper Division General	3	Spring Semester MAT101 Orientation to the Discipline MAT323 Modern Algebra 4 MAT333 or MAT463 3	Summer Semester	MAT353 Probability & Statistics Upper Division General Education Course Upper Division General	3	Spring Semester MAT443 Advanced Calculus MAT463 or MAT333 (depending on year)	3	Summer Semester
MAT363 History of Math & Theory of Numbers MAT413 Differential Equations Upper Division General Education Course	3	Spring Semester MAT101 Orientation to the Discipline MAT323 Modern Algebra 4 MAT333 or MAT463 (depending on year) 3	Summer Semester	MAT353 Probability & Statistics Upper Division General Education Course Upper Division General Education Course	3	Spring Semester MAT443 Advanced Calculus MAT463 or MAT333 (depending on year) MAT499 Capstone	3	Summer Semester
MAT363 History of Math & Theory of Numbers MAT413 Differential Equations Upper Division General Education Course General Education Course	3 3	Spring Semester MAT101 Orientation to the Discipline MAT323 Modern Algebra 4 MAT323 or MAT463 (depending on year) 3 MAT403 Linear Algebra 3	Summer Semester	MAT353 Probability & Statistics Upper Division General Education Course Upper Division General Education Course General Education Course	3 3	Spring Semester MAT443 Advanced Calculus MAT463 or MAT333 (depending on year) MAT499 Capstone Elective	3 4 3	Summer Semester
MAT363 History of Math & Theory of Numbers MAT413 Differential Equations Upper Division General Education Course General Education Course General Education Course	3 3 3	Spring Semester MAT101 Orientation to the Discipline MAT323 Modern Algebra 4 MAT323 Modern Algebra 4 MAT333 or MAT463 (depending on year) MAT403 Linear Algebra 3 General Education Course 3	Summer Semester	MAT353 Probability & Statistics Upper Division General Education Course Upper Division General Education Course General Education Course Elective	3 3	Spring Semester MAT443 Advanced Calculus MAT463 or MAT333 (depending on year) MAT499 Capstone Elective	3 4 3	Summer Semester
MAT363 History of Math & Theory of Numbers MAT413 Differential Equations Upper Division General Education Course General Education Course General Education Course	3 3 3	Spring Semester MAT101 Orientation to the Discipline MAT323 Modern Algebra 4 MAT323 Modern Algebra 4 MAT333 or MAT463 (depending on year) MAT403 Linear Algebra 3 General Education Course 3	Summer Semester	MAT353 Probability & Statistics Upper Division General Education Course Upper Division General Education Course General Education Course Elective	3 3	Spring Semester MAT443 Advanced Calculus MAT463 or MAT333 (depending on year) MAT499 Capstone Elective	3 4 3	Summer Semester
MAT363 History of Math & Theory of Numbers MAT413 Differential Equations Upper Division General Education Course General Education Course General Education Course	3 3 3	Spring Semester MAT101 Orientation to the Discipline MAT323 Modern Algebra 4 MAT323 Modern Algebra 4 MAT333 or MAT463 (depending on year) MAT403 Linear Algebra 3 General Education Course 3	Summer Semester	MAT353 Probability & Statistics Upper Division General Education Course Upper Division General Education Course General Education Course Elective	3 3	Spring Semester MAT443 Advanced Calculus MAT463 or MAT333 (depending on year) MAT499 Capstone Elective	3 4 3	Summer Semester

Total Units: <u>124</u> (124 units required to graduate)