# **Chemistry - Secondary Chemistry Education**

## Major Requirements

Lower Division Requirements	Pre-Req	Units	Note		
CHE115 General Chemistry I w/Lab	CHE102 or HS Chem	4			
CHE125 General Chemistry II w/Lab	CHE115	4	Spring only		
CHE230 Introduction to Molecular Modeling	CHE115	1	Spring only		
MAT245 Analytical Geometry & Calculus I	MAT135 or 145	4			
MAT255 Analytical Geometry & Calculus II	MAT245	4			
PHY214 Physics for Scientists I w/Lab	MAT145 or 245	4	Fall only (entrance exam)		
PHY224 Physics for Scientists II w/Lab	PHY214	4	Spring only		

Upper Division Requirements	Pre-Req	Units	Note
CHE321 Analytical Chemistry w/Lab	CHE125	4	Fall only
CHE351 Organic Chemistry I w/Lab	CHE125	4	Fall only
CHE352 Organic Chemistry II w/Lab	CHE351	4	Spring only
CHE415 Physical Chemistry I	CHE125 & MAT145 or 245	3	Fall only
CHE416 Physical Chemistry II w/Lab	CHE125, 230 & MAT245	4	Spring only (odd years)
CHE470 Instrumental Analysis	CHE321	4	Spring only (even years)
CHE480 Chemistry Research Seminar	See catalog	1	Fall only

Concentration Requirements	Pre-Req	Units	Note		
BIO146 General Biology I w/Lab	-	4			
BIO148 General Biology II w/Lab	-	4	Spring only		
CHE341 Advanced Inorganic Chemistry w/Lab	See catalog	4	Spring only (even years)		
PHY213 Astronomy	-	3	Fall only		
PSC151 Introduction to the Geosciences	-	3			

Total Major Units:	67
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<b>Upper Division Major Units:</b>	28

## General Education Requirements

Competency Requirements	Units	Note
English Competency	3	ENG113 required
Math Competency	3	MAT245 will fulfill
Technology	3	CIS265 recommended
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	CHE321 will fulfill
Science or Kinesiology	4	CHE351 will fulfill
Christian Studies	9	

\*Course is interdisciplinary

Upper Division Requirements	12	CHE321 & 351 will fulfill 6 units
Multicultural Requirements	9	ENG123 will fulfill 3 units
Interdisciplinary Requirements	9	

Total Required GE units:	51
<b>Upper Division Required GE Units:</b>	6

Additional Elective Units Needed:	6	
<b>Upper Division Elective Units Needed:</b>	5	

#### 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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		Freshman Year				Sophomore Year		
Fall Semester		<b>Spring Semester</b>	<b>Summer Semester</b>	Fall Semester		<b>Spring Semester</b>		<b>Summer Semester</b>
BIO146 General Biology I w/Lab	4	CHE125 General Chemistry II w/Lab		CHE351 Organic Chemistry I w/Lab		CHE230 Introduction to Molecular Modeling	1	
CHE115 General Chemistry w/Lab	4	BIO148 General Biology II w/Lab		MAT245 Analytical Geometry & Calculus I		CHE352 Organic Chemistry II w/Lab	4	
	3	ENG123 Composition 3		Upper Division General Education Course		MAT255 Analytical Geometry & Calculus II	4	
GST100 Focus	1	General Education Course 3		General Education Course 3	1	Upper Division General Education Course	3	
General Education Course or Math Course if needed)	3	Elective 1		General Education Course 3	1	General Education Course	3	
of Main Course it neceeds					1	Elective	1	
					1			
Caution: If additional Math i								
taken, an additional GE must be added to this plan.	be				١			
Total Units:	15	Total Units: 15	Total Units:	Total Units: 17	1	Total Units:	16	Total Units:
		Junior Year	1			Senior Year		
Fall Semester	1	Spring Semester	Summer Semester	Fall Semester		Spring Semester		Summer Semester
CHE321 Analytical Chemistry w/Lab	4	CHE470 Instrumental Analysis 4		CHE415 Physical Chemistry I	Ī	CHE416 Physical Chemistry II w/Lab	4	
	3	CHE341 Advanced Inorganic Chemistry w/Lab		CHE480 Chemistry Research Seminar	1	PHY224 Physics for Scientists II w/Lab	4	
Jpper Division General Education Course	3	Upper Division General Education Course		PHY214 Physics for Scientists I w/Lab	1	PSC151 Introduction to the Geosciences	3	
	3	General Education Course 3		General Education Course 3		General Education Course	3	
Elective	1	Elective 1		General Education Course 3	1	General Education Course	3	
				Elective 1	1			
	$\exists$				1			
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Total Units: <u>124</u> (124 units required to graduate)