Chemistry, BS

Bachelor of Science in Chemistry Degree Program Requirements

Complete Core Curriculum Listing at https://catalog.pvamu.edu/universitycorecurriculum/

Communication (Select Two) 6 MaTH 1316 Trigonomety Lile and Physical Sciences 1 PHYS 2325 (Inviersity Physics I or PHYS 1301 General Physical I PHYS 2326 (Inviersity Physica II or PHYS 1302 General Physical II Language, Philosophy, and Culture (Select One) 3 Carellace Arts (Select One) 3 American History (Select Two) 6 Covernment/Dicition Science 6 POSC 2305 American Government POSC 2306 American Government POSC 2305 American Government Social and Behavioral Sciences (Select One) 3 Component Area Option Two (Select One) 3 Component Area Option Two (Select One) 3 Component Area Option Two (Select One) 3 Departmental Requirements (Foreign Language Elective - one language) 6 Major Requirements (Foreign Language Elective - one language) 6 Major Requirements (Foreign Language Elective - one language) 6 CHEM 1303 General Inorganic Chemistry Lab 6 <tr< th=""><th>Core Curriculum 42 Credit Hou</th><th>urs</th><th></th></tr<>	Core Curriculum 42 Credit Hou	urs	
MATH 1316 Trigonometry Lile and Physical Sciences 6 PHYS 2325 University Physics I PHYS 1301 General Physics II PHYS 1302 General Physics II Language, Philosophy, and Culture (Select One) 3 Careative Arts (Select One) 3 American History (Select Two) 6 Government/Political Science 6 POSC 2306 Treas Covernment POSC 2306 Treas Covernment Social and Behavioral Sciences (Select One) 3 Component Area Option One (Select One) 3 Component Area Option Two (Select One) 3 Component Area Option Two (Select One) 3 Component Area Option Two (Select One) 3 Component Area Option One (Select One) 3 Component Area Option Two (Select One) 3 Component Area Option One (Select One) 3 Component Area Option One (Select One) 3 Cheff M 1203 General Chemistry Lab CHEM 1203 General Chemistry Lab CHEM 1204 General Chemistry Lab	Communication (Select Two)		6
Def	Mathematics		3
PHYS 2325	MATH 1316	Trigonometry	
PHYS 1301 General Physics II PHYS 2326 University Physics II General Physica II General Physics II General Physica II	Life and Physical Sciences		6
PHYS 2326 University Physics II or PHYS 1302 General Physics II 3 Creative Arts (Select One) 3 American History (Select Two) 6 Government/Political Science 6 POSC 2305 American Government POSC 2305 Texas Government Social and Behavioral Sciences (Select One) 3 Component Area Option One (Select One) 3 Component Area Option Two (Select One) 3 Departmental Requirements (Foreign Language Elective - one language) 6 Major Requirements ** 36 CHEM 1303 General Chemistry Lab CHEM 1303 General Inorganic Chemistry I CHEM 1304 General Inorganic Chemistry II CHEM 2201 Quantitative Analysis Lab CHEM 2201 Quantitative Analysis Lab CHEM 2203 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 2303 Organic Chemistry Lab II CHEM 3341 Physical Chemistry Lab CHEM 3452 Physical Chemistry Lab CHEM 3403 Biochemistry CHEM 3403	PHYS 2325	University Physics I	
or PHYS 1302 General Physics II Language, Philosophy, and Culture (Select One) 3 3 American History (Select Two) 6 6 Government Political Science 7	or PHYS 1301	General Physics I	
Language, Philosophy, and Culture (Select One) 3 Creative Arts (Select Two) 6 American History (Select Two) 6 Covernment/Political Science 6 POSC 2305 American Government POSC 2306 Texas Government Social and Behavioral Sciences (Select One) 3 Component Area Option One (Select One) 3 Component Area Option Two (Select One) 3 Departmental Requirements (Foreign Language Elective - one language) 6 Major Requirements 1 36 CHEM 1203 General Chemistry Lab CHEM 1203 General Chemistry Lab CHEM 1204 General Inorganic Chemistry I CHEM 1204 General Inorganic Chemistry Lab CHEM 1204 General Inorganic Chemistry I CHEM 2201 Quantitative Analysis CHEM 2201 Quantitative Analysis Lab CHEM 2204 Organic Chemistry Lab I CHEM 2204 Organic Chemistry Lab II CHEM 2303 General Organic Chemistry I CHEM 2304 Physical Chemistry Lab CHEM 3342 Physical Chemi	PHYS 2326	University Physics II	
Creative Arts (Select One) 3 American History (Select Two) 6 Coverment Problical Science 7 POSC 2305 American Goverment Social and Behavioral Sciences (Select One) 3 Social and Behavioral Sciences (Select One) 3 Component Area Option Two (Select One) 3 Opparatiment Requirements (Foreign Language Elective - one language) 6 Major Requirements 1 36 CHEM 1203 General Chemistry Lab CHEM 1303 General Inorganic Chemistry I CHEM 1304 General Inorganic Chemistry I CHEM 1204 General Inorganic Chemistry I CHEM 1204 General Inorganic Chemistry I CHEM 2201 Quantitative Analysis CHEM 2201 Quantitative Analysis Lab CHEM 2202 Organic Chemistry Lab I CHEM 2203 General Chemistry Lab I CHEM 2204 Organic Chemistry Lab I CHEM 2204 Organic Chemistry Lab I CHEM 3242 Physical Chemistry Lab CHEM 3242 Physical Chemistry CHEM 4303 Biochemistry <	or PHYS 1302	General Physics II	
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Soverment/Political Science	Creative Arts (Select One)		3
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POSC 2306 Texas Government Social and Behavioral Sciences (Select One) 3 Component Area Option One (Select One) 3 Component Area Option Two (Select One) 3 Departmental Requirements (Foreign Language Elective - one language) 6 Major Requirements (Foreign Language Elective - one language) 6 Major Requirements (Foreign Language Elective - one language) 6 CHEM 1203 General Chemistry Lab CHEM 1303 General Inorganic Chemistry Lab CHEM 1204 General Inorganic Chemistry II CHEM 1304 General Inorganic Chemistry II CHEM 2201 Quantitative Analysis CHEM 2201 Quantitative Analysis CHEM 2201 Quantitative Analysis CHEM 2203 Grganic Chemistry II CHEM 2303 General Organic Chemistry II CHEM 2304 General Organic Chemistry II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 4303 Biochemistry CHEM 4305 Instrumental Analysis Support Area 13 BIO	Government/Political Science		6
Scolal and Behavioral Sciences (Select One) 3 Component Area Option One (Select One) 3 Component Area Option Two (Select One) 6 Departments (Foreign Language Elective - one language) 6 Major Requirements (Foreign Language Elective - one language) 6 Major Requirements (Foreign Language Elective - one language) 6 CHEM 1203 General Chemistry Lab CHEM 1204 General Inorganic Chemistry II CHEM 1204 General Inorganic Chemistry II CHEM 2201 Quantitative Analysis CHEM 2201 Quantitative Analysis Lab CHEM 2203 Organic Chemistry Lab I CHEM 2203 General Organic Chemistry I CHEM 2204 General Organic Chemistry II CHEM 2204 General Chemistry Lab II CHEM 2204 General Chemistry Lab II CHEM 3242 Physical Chemistry Lab CHEM 3242 Physical Chemistry Lab CHEM 4305 Instrumental Analysis BIOL 1501			
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Major Requirements ¹ 36 CHEM 1203 General Chemistry Lab CHEM 1303 General Inorganic Chemistry I CHEM 1204 General Inorganic Chemistry Laboratory II CHEM 1304 General Inorganic Chemistry II CHEM 2201 Quantitative Analysis CHEM 2211 Quantitative Analysis Lab CHEM 2203 Organic Chemistry Lab I CHEM 2303 General Organic Chemistry I CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3304 General Organic Chemistry II CHEM 3342 Physical Chemistry Lab CHEM 3403 Biochemistry CHEM 4105 Research CHEM 4106 Research CHEM 4105 Research Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concertations from below 20 Total Hours Physical Chemistry Ted M3342 Ph			
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CHEM 1303 General Inorganic Chemistry I CHEM 1204 General Inorganic Chemistry Laboratory II CHEM 1304 General Inorganic Chemistry II CHEM 2201 Quantitative Analysis CHEM 2211 Quantitative Analysis Lab CHEM 2203 Organic Chemistry Lab I CHEM 2303 General Organic Chemistry I CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3342 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4305 Research CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Teadlitional Chemistry Concentration 3 CHEM 3342 Physical Chemistry Lab 2 CHEM 41			36
CHEM 1204 General Inorganic Chemistry Laboratory II CHEM 1304 General Inorganic Chemistry II CHEM 2201 Quantitative Analysis CHEM 2211 Quantitative Analysis Lab CHEM 2203 Organic Chemistry Lab I CHEM 2303 General Organic Chemistry I CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3342 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature		·	
CHEM 1304 General Inoganic Chemistry II CHEM 2201 Quantitative Analysis CHEM 2211 Quantitative Analysis Lab CHEM 2203 Organic Chemistry Lab I CHEM 2303 General Organic Chemistry I CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3242 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry Lab 2 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 2201 Quantitative Analysis CHEM 2211 Quantitative Analysis Lab CHEM 2203 Organic Chemistry Lab I CHEM 2303 General Organic Chemistry I CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3242 Physical Chemistry Lab CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 2211 Quantitative Analysis Lab CHEM 2203 Organic Chemistry Lab I CHEM 2303 General Organic Chemistry I CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3242 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry Lab 2 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 2203 Organic Chemistry Lab I CHEM 2303 General Organic Chemistry I CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3242 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry Lab 2 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1		•	
CHEM 2303 General Organic Chemistry I CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3242 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration 3 CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1		•	
CHEM 2204 Organic Chemistry Lab II CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3242 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration 3 CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 2304 General Organic Chemistry II CHEM 3341 Physical Chemistry CHEM 3242 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration 3 CHEM 3342 Physical Chemistry Lab 2 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 3341 Physical Chemistry CHEM 3242 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration 3 CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 3242 Physical Chemistry Lab CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 4303 Biochemistry CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 4105 Research CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration 3 CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
CHEM 4305 Instrumental Analysis Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1		·	
Support Area 13 BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry 3 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
BIOL 1501 General Biology MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry 2 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1		ilistrumentai Analysis	13
MATH 2413 Calculus with Analytic Geometry I MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry 20 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1		General Riology	13
MATH 2414 Calculus with Analytic Geometry II Select one of the following concentrations from below 23 Total Hours 120 Traditional Chemistry Concentration CHEM 3342 Physical Chemistry 20 CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1			
Select one of the following concentrations from below23Total Hours120Traditional Chemistry ConcentrationCHEM 3342Physical ChemistryCHEM 3243Physical Chemistry Lab2CHEM 4100Journal Reading and Chemical Literature1		· · · · · · · · · · · · · · · · · · ·	
Traditional Chemistry Concentration CHEM 3342 Physical Chemistry CHEM 3243 Physical Chemistry Lab CHEM 4100 Journal Reading and Chemical Literature 120 Total Hours 120 120 120 120 120 120 120 12			23
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CHEM 3342Physical Chemistry3CHEM 3243Physical Chemistry Lab2CHEM 4100Journal Reading and Chemical Literature1	I Oldi MUUIS		120
CHEM 3243 Physical Chemistry Lab 2 CHEM 4100 Journal Reading and Chemical Literature 1	Traditional Chemistry Conce	entration	
CHEM 4100 Journal Reading and Chemical Literature 1	CHEM 3342	Physical Chemistry	3
	CHEM 3243	Physical Chemistry Lab	2
CHEM 4205 Instrumental Analysis Lab 2	CHEM 4100	Journal Reading and Chemical Literature	1
	CHEM 4205	Instrumental Analysis Lab	2

CHEM 4106	Research	1
CHEM 4306	Inorganic Chemistry	3
MATH 3401	Calculus III	4
PHYS 1101	General Physics Lab I	1
PHYS 1102	General Physics Lab II	1
Restricted electives (Se	elect 5 hours from the courses below:)	5
BIOL 1102	Biology Seminar	
BIOL 3401	Human Physiology and Anatomy	
BIOL 3402	Human Physiology and Anatomy	
BIOL 3403	General Microbiology	
CHEM 3350	Introduction to Cosmetic Chemistry	
CHEM 3351	Introduction to Green and Sustainable Chemistry Principles	
CHEM 4302	Forensic Chemistry	
CHEM 4204	Biochemistry Laboratory	
Total Hours		23
Biomedical Science Cor	ncentration	
BIOL 1502	General Biology	5
BIOL 3401	Human Physiology and Anatomy	4
MATH 1342	Elementary Statistics	3
PHYS 1101	General Physics Lab I	1
PHYS 1102	General Physics Lab II	1
Restricted Electives (Se	elect 9 hours from the courses below):	9
BIOL 1102	Biology Seminar	
BIOL 2416	Genetics	
BIOL 3402	Human Physiology and Anatomy	
BIOL 3403	General Microbiology	
CHEM 3243	Physical Chemistry Lab	
CHEM 3342	Physical Chemistry	
CHEM 3350	Introduction to Cosmetic Chemistry	
CHEM 3351	Introduction to Green and Sustainable Chemistry Principles	
CHEM 4100	Journal Reading and Chemical Literature	
CHEM 4205	Instrumental Analysis Lab	
CHEM 4106	Research	
CHEM 4306	Inorganic Chemistry	
Total Hours	·	23
Forensic Science Conce	entration	
CHEM 4100	Journal Reading and Chemical Literature	1
CHEM 4302	Forensic Chemistry	3
CHEM 4203	Forensic Chemistry Lab ²	2
CHEM 4306	Inorganic Chemistry	3
MATH 1342	Elementary Statistics	3
PHYS 2125	University Physics Lab I	1
PHYS 2126	University Physics Lab II	1
Restricted Electives (Se	elect 9 hours form the following courses):	9
CHEM 3350	Introduction to Cosmetic Chemistry	
CHEM 3351	Introduction to Green and Sustainable Chemistry Principles	
CRIJ 1301	Introduction to Criminal Justice	
CRIJ 1306	Court Systems and Practices	
CRIJ 3362	Criminal Law	
CRIJ 4392	Criminology	
BIOL 1502	General Biology	

BIOL 2416	Genetics
BIOL 3401	Human Physiology and Anatomy
BIOL 3402	Human Physiology and Anatomy
BIOL 3403	General Microbiology
BIOL 3404	Immunology
BIOL 3307	Molecular Biology I

Total Hours 23

1 Students majoring in Chemistry must earn a minimum grade of "C" in all classes taken in their major disciplines

Bachelor of Science in Chemistry- Traditional Degree Sequence

Core: https://catalog.pvamu.edu/universitycorecurriculum/

Freshman

Fall - Semester 1	Hours	Spring - Semester 2	Hours	Summer	Hours	
CHEM 1303		3 CHEM 1304		3 American History Cor	e	3
CHEM 1203		2 CHEM 1204		2		
Communication Core		3 Communication Core		3		
Component Area Option Two Core	n	3 American History Core		3		
Mathematics Core		3 MATH 2413		4		
MATH 1316						
Total		14 Total		15 Total		3

Total Hours: 32

Sophomore

Total		17 Total	15
CHEM 2211		2	
CHEM 2201		2 MATH 2414	4
BIOL 1501		5 Language, Philosophy, and Culture Core	3
POSC 2305		POSC 2306	
Government/Political Science Core		3 Government/Political Science Core	3
CHEM 2303		3 CHEM 2304	3
CHEM 2203		2 CHEM 2204	2
Fall - Semester 1	Hours	Spring - Semester 2	Hours
•			

Total Hours: 32

Junior

Fall - Semester 1	Hours	Spring - Semester 2	Hours
PHYS 1101		1 Component Area Option One Core	3
Life and Physical Sciences Core		3 Life and Physical Sciences Core	3
PHYS 2325		PHYS 2326	
CHEM 3341		3 PHYS 1102	1
CHEM 3242		2 CHEM 4100	1
Creative Arts Core		3 CHEM 3342	3
CHEM 4105		1 CHEM 3243	2
Restricted Elective		1 Social and Behavioral Sciences Core	3
Total		14 Total	16

Total Hours: 30

A six-week summer internship or externship in an approved forensic laboratory or DEA Laboratory can be used to earn credit for CHEM 4203 by submitting a detailed report of laboratory techniques acquired during the externship

4 Chemistry, BS

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Fall - Semester 1	Hours	Spring - Semester 2	Hours
CHEM 4303		3 CHEM 4306	3
MATH 3401		4 CHEM 4305	3
Restricted Elective		4 CHEM 4205	2
Foreign Language I		3 CHEM 4106	1
		Foreign Language II	3
Total		14 Total	12

Total Hours: 26

Name Unit

Total Semester Credit Hours: 120

BS Chemistry-Biomedical Science

Core: https://catalog.pvamu.edu/universitycorecurriculum/

Freshman

Fall - Semester 1	Hours	Spring - Semester 2	Hours	Summer	Hours	
CHEM 1303		3 CHEM 1304		3 American History	Core	3
CHEM 1203		2 CHEM 1204		2		
Communication Core		3 Communication Core		3		
Component Area Option One Core	า	3 American History Core		3		
Mathematics Core		3 MATH 2413		4		
MATH 1316						
Total		14 Total		15 Total		3

Total Hours: 32

Sophomore

Fall - Semester 1	Hours	Spring - Semester 2	Hours
CHEM 2203		2 CHEM 2204	2
CHEM 2303		3 CHEM 2304	3
Government/Political Science Core		3 Government/Political Science Core	3
POSC 2305		POSC 2306	
BIOL 1501		5 BIOL 1502	5
CHEM 2201		2 MATH 2414	4
CHEM 2211		2	
Total		17 Total	17

Total Hours: 34

Junior

Fall - Semester 1	Hours	Spring - Semester 2	Hours
PHYS 1101		1 CHEM 4105	1
Life and Physical Sciences Core		3 Life and Physical Sciences Core	3
PHYS 2325		PHYS 2326	
CHEM 3341		3 PHYS 1102	1
CHEM 3242		2 Social and Behavioral Sciences Core	3
BIOL 3401		4 MATH 1342	3
Language, Philosophy, and Culture Core		3 Creative Arts Core	3
Total		16 Total	14

Total Hours: 30

Senior

Fall - Semester 1	Hours	Spring - Semester 2	Hours
CHEM 4303		3 Component Area Option Two Core	3
Restricted Elective		3 CHEM 4305	3
Restricted Elective		3 Research Elective	3
Foreign Language I		3 Foreign Language II	3
Total		12 Total	12

Total Hours: 24

Name Unit

Total Semester Credit Hours: 120

BS Chemistry-Forensic Science

Core: https://catalog.pvamu.edu/universitycorecurriculum/

Freshman

Fall - Semester 1	Hours	Spring - Semester 2	Hours	Summer	Hours	
CHEM 1303		3 CHEM 1304		3 American History Core		3
CHEM 1203		2 CHEM 1204		2		
Communication Core		3 Communication Core		3		
Component Area Option Two Core	1	3 American History Core		3		
Mathematics Core		3 MATH 2413		4		
MATH 1316						
Total		14 Total		15 Total		3

Total Hours: 32

Sophomore

Fall - Semester 1	Hours	Spring - Semester 2	Hours
CHEM 2203		2 CHEM 2204	2
CHEM 2303		3 CHEM 2304	3
Government/Political Science Core		3 Government/Political Science Core	3
POSC 2305		POSC 2306	
BIOL 1501		5 Language, Philosophy, and Culture Core	3
CHEM 2201		2 MATH 2414	4
CHEM 2211		2	
Total		17 Total	15

Total Hours: 32

Junior

Fall - Semester 1	Hours	Spring - Semester 2	Hours
PHYS 2125		1 CHEM 4305	3
Life and Physical Sciences Core		3 Life and Physical Sciences	3
PHYS 2325		PHYS 2326	
CHEM 3341		3 PHYS 2126	1
CHEM 3242		2 CHEM 4100	1
Creative Arts Core		3 CHEM 4302	3
MATH 1342		3 CHEM 4203	2
Total		15 Total	13

Total Hours: 28

Senior

Fall - Semester 1	Hours	Spring - Semester 2	Hours
CHEM 4303		3 CHEM 4306	3
CHEM 4105		1 Component Area Option Two Core	3
Social and Behavioral Sciences Core		3 Restricted Elective	3
Restricted Elective		3 Restricted Elective	3
Foreign Language I		3 Foreign Language II	3
Total		13 Total	15

Total Hours: 28

Name Unit

Total Semester Credit Hours: 120

Marketable Skills

Marketable skills, as defined by the Texas Higher Education Coordinating Board's 60x30TX Plan (http://www.60x30tx.com/), include interpersonal, cognitive, and applied skill areas, are valued by employers, and can be either primary or complementary to a major. Marketable skills are acquired by students through education, including curricular, co-curricular, and extracurricular activities.

BS Chemistry

Degree Skills

- 1. Conduct scientific research
- 2. Analyze and summarize data
- 3. Use of diverse instrumentation

Concentration Skills

- 1. Project management
- 2. Environmental analysis
- 3. Problem solving

Co-curricular and Extracurricular Skills

- 1. Mathematics
- 2. Computer programming
- 3. Technical writing and presentation skills