1

BACHELOR OF SCIENCE, MAJOR IN CHEMISTRY FOR OTHER TECHNICAL CAREERS

Component Area II (Communication) 6 Component Area II (Mathematics) ¹ 4 Component Area II (Life and Physical Science) ² 8 Component Area IV (Language, Philosophy, and Culture) 3 Component Area VI (Construe Arts) 3 Component Area VI (Government/Political Science) 6 Component Area VI (Government/Political Science) 6 Component Area VII (Government/Political Science) 3 Somponent Area VII (Government/Political Science) 4 ANTH 1420 Calculus II 4 Math 1420 Calculus II 4 Math 1420 Calculus Science Area Physics Laboratory I 4 PHYS 1302 Gen PhySind Light, Elec, & Mag 4 PHYS 1302 General Chemistry I ² 4 Otex 225 Organic Chemistry II Lebure 4 Otex 225 Organic Chemistry II	Code	Title	Hours
Component Area II (Communication) 6 Component Area II (Mathematics) ¹ 4 Component Area II (Life and Physical Science) ² 8 Component Area IV (Language, Philosophy, and Culture) 3 Component Area VI (Construe Arts) 3 Component Area VI (Government/Political Science) 6 Component Area VI (Government/Political Science) 6 Component Area VII (Government/Political Science) 3 Somponent Area VII (Government/Political Science) 4 ANTH 1420 Calculus II 4 Math 1420 Calculus II 4 Math 1420 Calculus Science Area Physics Laboratory I 4 PHYS 1302 Gen PhySind Light, Elec, & Mag 4 PHYS 1302 General Chemistry I ² 4 Otex 225 Organic Chemistry II Lebure 4 Otex 225 Organic Chemistry II	Bachelor of Science, Ma	jor in Chemistry for Other Technical Careers	
Component Area II (Mathematics) ¹ 4 Component Area III (Life and Physical Sciences) ² 8 Component Area VI (Language, Philosophy, and Culture) 3 Component Area VI (Careative Arts) 3 Component Area VI (Coreative Arts) 6 Component Area VI (Coreative Arts) 6 Component Area VII (Social and Behavioral Science) 6 Component Area VII (Social and Behavioral Science) 3 Component Area VII (Social and Behavioral Sciences) 3 Component Area VII (Social and Behavioral Science) 3 Degree Specific Requirement/Political Science) 3 Somponent Area VII (Covernment/Political Science) 3 MATH 1420 Calculus 1 4 MATH 1420 Calculus 1 4 MATH 1420 Calculus 1 4 PHYS 1301 General Physics Laboratory 1 4 PHYS 1302 Gen Phys-Knick, Elskoratory 1 4 Major Core 4 CHEM 1411 General Chemistry 1 ² 4 CHEM 1223 organic Chemistry 1 Lebture 4 CHEM 2123 and Organic Chemistry 1 Lebture 4 CHEM 2123 and Organic Chemistry 1 Lebture 4 CHEM 22401 Quanitative Analysis 4 CHEM 2401 <td< td=""><td>Core Curriculum</td><td></td><td></td></td<>	Core Curriculum		
Component Area III (Life and Physical Sciences) 28Component Area IV (Language, Philosophy, and Culture)3Component Area VI (Covernment/Political Science)6Component Area VII (Government/Political Science)3Component Area IVI (Social and Behavioral Sciences)3Somponent Area IVI (Social and Behavioral Sciences)3Somponent Area IVI (Social and Behavioral Sciences)3Somponent Area IVI (Area IV elective of Oral Communication)3Somponent Area IVI (Social and Behavioral Science)3Somponent Area IVI (Social and Behavioral Physics Laboratory II4Matri 1430Galculus II4Someral Physics Laboratory II4 <t< td=""><td></td><td>6</td></t<>		6	
Component Area IV (Language, Philosophy, and Culture)3Component Area V (Creative Arts)3Component Area VI (Covernment/Political Science)6Component Area VII (Government/Political Sciences)3Component Area VII (Social and Behavioral Sciences)3Component Area VII (Social and Behavioral Sciences)3Degree Specific Requirements3Degree Specific Requirements3MATH 1420Calculus I4Ath 1430Calculus I4Ath 1430Calculus I4PHYS 1301General Phy-Mechanics & Heat4PHYS 1101and General Physics Laboratory I4PHYS 1102General Physics Laboratory II4Adjor Core44PHYS 1102and General Physics Laboratory II4PHYS 1102General Chemistry I ² 4CHEM 1411General Chemistry I ² 4CHEM 1423Organic Chemistry I Lecture4CHEM 1223and Organic Chemistry I Lab4CHEM 1225and Organic Chemistry ILeb4CHEM 125and Organic Chemistry II Lab1CHEM 4260Advanced Intergate Seminar1CHEM 4367Advanced Intergate Seminar3CHEM 4395Undergrad Research In Chem3CHEM 4395Undergrad Research In Chem3CHEM 4395Undergrad Research In Chem3CHEM 4488Physical Chemistry I4CHEM 4488Physical Chemistry I4CHEM 4488Physica		4	
Component Area V (Creative Arts)3Component Area VI (Government/Political Science)6Component Area VII (Government/Political Science)3Component Area VII (Social and Behavioral Sciences)3Component Area VII (Social and Behavioral Sciences)3Degree Specific Requirements3Degree Specific Requirements3MATH 1420Calculus I4MATH 1420Calculus I4MATH 1430Calculus I4MATH 1430General Physics Laboratory I4PHYS 1301General Physics Laboratory I4PHYS 1302Gen Phy-Shd.Lght, Elee, & Mag4PHYS 1302General Chemistry I ² 4CHEM 1411General Chemistry I ² 4CHEM 1411General Chemistry I ² 4CHEM 1412General Chemistry I ² 4CHEM 1412General Chemistry I ¹ 4CHEM 1425Organic Chemistry I Lecture4CHEM 1425Organic Chemistry I Lecture4CHEM 1426Advanced Integrated Laboratory2CHEM 14367Advanced Integrated Laboratory3CHEM 14367Advanced Integrated Laboratory3CHEM 14367Matherature Analytical Chem4CHEM 14367Matherature Analytical Chem4CHEM 14367Matherature Analytical Chem3CHEM 14367 <td>Component Area III (Life</td> <td>and Physical Sciences)²</td> <td>8</td>	Component Area III (Life	and Physical Sciences) ²	8
Component Area VI (Government/Political Science)6Component Area VII (Government/Political Science)6Component Area VII (Government/Political Science)3Degree Specific Requirements3Degree Specific Requirements3NICI 3330Intro To Technical Writing3MATH 1420Calculus I4MATH 1420Calculus I4PHYS 1301General Phy-Kochanics & Heat4PHYS 1302General Phy-Sind Light, Elec, & Mag4PHYS 1102and General Physics Laboratory I4PHYS 1102and General Physics Laboratory I4PHYS 1102and General Chemistry I ² 4CHEM 1411General Chemistry I ² 4CHEM 1412General Chemistry I ² 4CHEM 1412General Chemistry I ² 4CHEM 1412General Chemistry I Lecture4CHEM 2325Organic Chemistry I Lecture4CHEM 2325Organic Chemistry I Lecture4CHEM 2401Quantitative Analysis4CHEM 4100Chemical Literature Seminar1CHEM 4260Advanced Intergrated Laboratory3CHEM 4367Advanced Intergrated Laboratory3CHEM 4480Physical Chemistry I4CHEM 4480Physical Ch	Component Area IV (Language, Philosophy, and Culture)		3
Component Area VII (Government/Political Science)6Component Area VII (Gocial and Behavioral Sciences)3Component Area VII (Acical Velective or Oral Communication)3Degree Specific Requirement3MATH 1420Calculus I4AMTH 1420Calculus I4PHYS 1301General Phy-Mechanics & Heat4PHYS 1301General Phy-Mechanics & Heat4PHYS 1302General Physics Laboratory I4PHYS 1302General Physics Laboratory I4Mair OraGeneral Physics Laboratory I4Mair Core44Chem 1223organic Chemistry I4CHEM 1412General Chemistry II4CHEM 1412General Chemistry II Lecture4CHEM 1223organic Chemistry II Lecture4CHEM 225Organic Chemistry II: Lecture4CHEM 225organic Chemistry II: Lecture4CHEM 2401Quantitative Analysis4CHEM 4200Advanced Integrated Laboratory2CHEM 4201Advanced Integrated Laboratory3CHEM 4305Undergrad Research In Chem3CHEM 4400Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4440Instrumental Analytical Chem3CHEM 4440Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4	Component Area V (Crea	ative Arts)	3
Component Area VIII (Social and Behavioral Sciences)3Component Area IV (Area IV elective or Oral Communication)3Degree Specific Requirements3SUGL 330Intro To Technical Writing3MATH 1420Calculus I4MATH 1430Calculus I4PHYS 1301General PhySics Laboratory I4PHYS 1302Gen Phy-ShdLght, Elec, & Mag4RehrYS 1101and General Physics Laboratory I4Wajor Core44PHYS 1302General Chemistry I ² 4CHEM 1411General Chemistry I ² 4CHEM 1412General Chemistry I ² 4CHEM 1223organic Chemistry I ² 4CHEM 2123and Organic Chemistry I Lecture4CHEM 2125organic Chemistry I Lecture4CHEM 2125and Organic Chemistry I Lecture3CHEM 4260Advanced Inorganic Chemistry3CHEM 4260Advan	Component Area VI (Am	erican History)	6
Component Area IX (Area IV elective or Oral Communication)3Degree Specific Requirements3ENGL 3330Into To Technical Writing3MATH 1420Calculus I4MATH 1430Calculus I4PHYS 1301General Phy-Mechanics & Heat4PHYS 1301and General Physics Laboratory I4Wath 1420General Physics Laboratory I4PHYS 1102and General Physics Laboratory I4Wajor Core44CHEM 1411General Chemistry I ² 4CHEM 1412General Chemistry I ² 4CHEM 1223and Organic Chemistry I: Lecture4& CHEM 225Organic Chemistry I: Lecture4& CHEM 225and Organic Chemistry I: Lecture4& CHEM 2401Quantitative Analysis4CHEM 4260Advanced Integrated Laboratory2CHEM 4260Advanced Integrated Laboratory2CHEM 4367Advanced Integrated Laboratory3CHEM 4367Madvanced Integrated Laboratory3CHEM 4367Madvanced Integrated Laboratory3CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM	Component Area VII (Go	vernment/Political Science)	6
Degree Specific Requirements 3 ENGL 3330 Intro To Technical Writing 3 MATH 1420 Calculus I ¹ 4 MATH 1420 Calculus I 4 MATH 1420 Calculus II 4 WATH 1420 Calculus II 4 WATH 1430 Calculus II 4 WATH 1430 Calculus II 4 PHYS 1301 General Physics Laboratory I 4 PHYS 1302 Gen Phy-Snd,Lght, Elec, & Mag 4 PHYS 1102 and General Physics Laboratory II 4 Major Core 5 5 VELM 1411 General Chemistry I ² 4 CHEM 1412 General Chemistry I ² 4 CHEM 1223 Organic Chemistry I Lecture 4 CHEM 2325 Organic Chemistry I Leture 4 CHEM 2401 Quantitative Analysis 4 CHEM 4307 Advanced Integrated Laboratory 2 CHEM 4367 Advanced Integrated Laboratory 3 CHEM 4367 Advanced Integrated Laboratory 3 CHEM 4385 Undergrad Research In Chem 3 <	Component Area VIII (So	ocial and Behavioral Sciences)	3
ENGL 3330Intro To Technical Writing3MATH 1420Calculus I4MATH 1430Calculus I4MATH 1430Calculus I4WATH 1430General Physiechanics & Heat4& PHYS 1301General Physies Laboratory I4PHYS 1302Gen Phy-Snd Lght, Elec, & Mag4& PHYS 1302Gen Phy-Snd Lght, Elec, & Mag4& PHYS 1302Gen Phy-Snd Lght, Elec, & Mag4& PHYS 1302Gen eral Chemistry I4Chem 1411General Chemistry I4CHEM 1412General Chemistry I4CHEM 2323Organic Chemistry I Lecture4CHEM 2325Organic Chemistry I: Lecture4CHEM 2325Organic Chemistry II: Lab4CHEM 2401Quantitative Analysis4CHEM 4200Chemical Literature Seminar1CHEM 4367Advanced Integrated Laboratory2CHEM 4367Advanced Integrated Laboratory3CHEM 4395Undergrad Research In Chem3CHEM 4480Physical Chemistry I4CHEM 4448Physical Chemistry	Component Area IX (Area	a IV elective or Oral Communication)	3
MATH 1420 Calculus I ¹ 4 MATH 1430 Calculus II 4 MATH 1430 Calculus II 4 PHYS 1301 General Physics Laboratory I 4 PHYS 1302 Gen Phy-SndLght, Elec, & Mag 4 8 PHYS 1102 and General Physics Laboratory II 4 Major Core 4 4 CHEM 1411 General Chemistry I ² 4 CHEM 1412 General Chemistry II ² 4 CHEM 1412 General Chemistry II 2 4 CHEM 1412 General Chemistry II Lecture 4 CHEM 123 and Organic Chemistry II: Lecture 4 CHEM 2125 organic Chemistry II: Lecture 4 CHEM 2125 and Organic Chemistry II: Leb 4 CHEM 2125 and Organic Chemistry II: Leb 4 CHEM 2401 Quantitative Analysis 4 CHEM 4260 Advanced Integrated Laboratory 2 CHEM 4367 Advanced Integrate Chemistry I 3 CHEM 448 Physical Chemistry I 4 CHEM 4440 Instrumental Analytical Chem 4 CHEM	Degree Specific Require	ments	
MATH 1430Calculus II4PHYS 1301General Physics Laboratory I4PHYS 1302Gen Phy-Snd,Lght, Elec, & Mag4PHYS 1302Gen Phy-Snd,Lght, Elec, & Mag4PHYS 1302Gen Phy-Snd,Lght, Elec, & Mag4PHYS 1302Gen eral Physics Laboratory II6Major Core66VELM 1411General Chemistry I ² 4CHEM 1412General Chemistry II ² 4CHEM 1223Organic Chemistry I Lecture4& CHEM 2325Organic Chemistry I Lecture4& CHEM 2125and Organic Chemistry I Lecture4& CHEM 2125and Organic Chemistry I Lecture4CHEM 4100Chemical Literature Seminar1CHEM 4260Advanced Integrated Laboratory2CHEM 4367Advanced Integrated Laboratory3CHEM 4395Undergrad Research In Chem3CHEM 448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448P	ENGL 3330	Intro To Technical Writing	3
PHYS 1301General Phy-Mechanics & Heat4& PHYS 1101and General Physics Laboratory I4PHYS 1302Gen Phy-Snd,Lght, Elec, & Mag4& PHYS 1102and General Physics Laboratory II6Major Core4Major Core4CHEM 1411General Chemistry I ² 4CHEM 1412General Chemistry II ² 4CHEM 2323Organic Chemistry I Lecture4& CHEM 2123and Organic Chemistry I Lecture4& CHEM 2125Organic Chemistry II: Lecture4& CHEM 2125organic Chemistry II: Lecture4& CHEM 2125organic Chemistry II: Lecture4& CHEM 2125and Organic Chemistry II: Lecture4& CHEM 2401Quantitative Analysis4CHEM 4201Quantitative Analysis4CHEM 4201Advanced Integrated Laboratory2CHEM 4367Advanced Integrated Laboratory3CHEM 4365Undergrad Research In Chem3CHEM 4448Physical Chemistry I4CHEM	MATH 1420	Calculus I ¹	4
& PHYS 1101 and General Physics Laboratory I PHYS 1302 Gen Phy-Snd,Lght, Elec, & Mag 4 & PHYS 1102 and General Physics Laboratory II 4 Major Core	MATH 1430	Calculus II	4
PHYS 1302Gen Phy-Snd,Lght, Elec, & Mag4& PHYS 1102and General Physics Laboratory IIMajorCHEM 1411General Chemistry I2CHEM 1411General Chemistry II2CHEM 1412General Chemistry II2CHEM 2323Organic Chemistry I Lecture& CHEM 2325Organic Chemistry II: Lecture& CHEM 2125organic Chemistry II: LectureCHEM 4201Quantitative AnalysisCHEM 4260Advanced Integrated LaboratoryCHEM 4367Advanced Integrated LaboratoryCHEM 4395Undergrad Research In ChemCHEM 4440Instrumental Analytical ChemCHEM 4440Physical Chemistry ICHEM 4440Physical Chemistry ICHEM 4448Physical Chemistry I </td <td>PHYS 1301</td> <td>•</td> <td>4</td>	PHYS 1301	•	4
A PHYS 1102 and General Physics Laboratory II Major Core Major Core CHEM 1411 General Chemistry I ² 4 CHEM 1412 General Chemistry II ² 4 CHEM 2323 Organic Chemistry I. Lecture 4 CHEM 2325 Organic Chemistry II. Lecture 4 CHEM 2325 Organic Chemistry II. Lecture 4 CHEM 2325 Organic Chemistry II. Lecture 4 CHEM 2125 and Organic Chemistry II. Lecture 4 CHEM 2125 Organic Chemistry II. Lecture 4 CHEM 2125 Organic Chemistry II. Lecture 4 CHEM 2125 and Organic Chemistry II. Lecture 4 CHEM 2125 and Organic Chemistry II. Lecture 4 CHEM 2401 Quantitative Analysis 4 CHEM 4201 Chemical Literature Seminar 1 CHEM 4260 Advanced Integrated Laboratory 3 CHEM 4367 Jundergrad Research In Chem 3 CHEM 4448 Physical Chemistry I 4 CHEM 4448 Physical Chemistry I 3 <td>& PHYS 1101</td> <td></td> <td></td>	& PHYS 1101		
Major Core Major CHEM 1411 General Chemistry I ² 4 CHEM 1412 General Chemistry II 2 4 CHEM 2323 Organic Chemistry I: Lecture 4 & CHEM 2323 organic Chemistry II: Lecture 4 & CHEM 2325 Organic Chemistry II: Lecture 4 & CHEM 2325 Organic Chemistry II: Lecture 4 & CHEM 2125 and Organic Chemistry II: Lecture 4 & CHEM 2125 and Organic Chemistry II: Lecture 4 & CHEM 2401 Quantitative Analysis 4 CHEM 4400 Chemical Literature Seminar 1 CHEM 4260 Advanced Integrated Laboratory 2 CHEM 4367 Advanced Inorganic Chemistry 3 CHEM 4395 Undergrad Research In Chem 3 CHEM 4448 Physical Chemistry I 4 CHEM 4448 Physical Chemistry I 4 <td>PHYS 1302</td> <td></td> <td>4</td>	PHYS 1302		4
Major General Chemistry I ² 4 CHEM 1411 General Chemistry II ² 4 CHEM 1412 General Chemistry II. Lecture 4 CHEM 2323 Organic Chemistry I. Lecture 4 & CHEM 2123 and Organic Chemistry II. Lecture 4 & CHEM 2325 Organic Chemistry II. Lecture 4 & CHEM 2125 and Organic Chemistry II. Lecture 4 & CHEM 2125 and Organic Chemistry II. Lecture 4 CHEM 2401 Quantitative Analysis 4 CHEM 2401 Quantitative Analysis 4 CHEM 4200 Advanced Integrated Laboratory 2 CHEM 4260 Advanced Inorganic Chemistry 3 CHEM 4367 Advanced Inorganic Chemistry 3 CHEM 4305 Undergrat Research In Chem 3 CHEM 4440 Instrumental Analytical Chem 4 CHEM 4448 Physical Chemistry I 4 CHEM 44448 Physical Chemistry I		and General Physics Laboratory II	
CHEM 1411General Chemistry I24CHEM 1412General Chemistry II24CHEM 2323Organic Chemistry I. Lecture4& CHEM 2123and Organic Chemistry I Lab4CHEM 2325Organic Chemistry II: Lecture4& CHEM 2125and Organic Chemistry II: Lab4CHEM 2401Quantitative Analysis4CHEM 4100Chemical Literature Seminar1CHEM 4260Advanced Integrated Laboratory2CHEM 4367Advanced Integrated Laboratory3CHEM 4440Instrumental Analytical Chem3CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 4448Physical Chemistry I <td>-</td> <td></td> <td></td>	-		
CHEM 1412General Chemistry II 24CHEM 2323Organic Chemistry I: Lecture4& CHEM 2123and Organic Chemistry I Lab4CHEM 2325Organic Chemistry II: Lecture4& CHEM 2125and Organic Chemistry II: Lab4CHEM 2401Quantitative Analysis4CHEM 4100Chemical Literature Seminar1CHEM 4260Advanced Integrated Laboratory2CHEM 4367Advanced Integrated Laboratory3CHEM 4395Undergrad Research In Chem3CHEM 4440Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I10CHEM 4448Physical Chemistry I10CHEM 4448Physical Chemis	-		
CHEM 2323Organic Chemistry I: Lecture4& CHEM 2123and Organic Chemistry I Lab4CHEM 2325Organic Chemistry II: Lecture4& CHEM 2125and Organic Chemistry II: Lab4CHEM 2401Quantitative Analysis4CHEM 4100Chemical Literature Seminar1CHEM 4260Advanced Integrated Laboratory2CHEM 4367Advanced Integrated Laboratory3CHEM 4395Undergrad Research In Chem3CHEM 4440Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry			
& CHEM 2123 and Organic Chemistry I Lab CHEM 2325 Organic Chemistry II: Lecture 4 & CHEM 2125 and Organic Chemistry II: Lab 4 CHEM 2401 Quantitative Analysis 4 CHEM 4100 Chemical Literature Seminar 1 CHEM 4260 Advanced Integrated Laboratory 2 CHEM 4367 Advanced Integrated Laboratory 3 CHEM 4367 Advanced Inorganic Chemistry 3 CHEM 4395 Undergrad Research In Chem 3 CHEM 4440 Instrumental Analytical Chem 4 CHEM 4448 Physical Chemistry I 4 CHEM 4448 Physical Chemistry I 4 CHEM 4448 Physical Chemistry I 3 CHEM 4448 Physical Chemistry I 3 CHEM 4448 Physical Chemistry I 4 CHEM 4448 Physical Chemistry I 4 CHEM 4448 Physical Chemistry I 3 CHEM 4448 Physical Chemistry I 3 CHEM 4448 Physical Chemistry I 4 CHEM 4448 Physical Chemistry I 3 CHEM 4448 Physical Chemistry I 3 CHEM 4448 Physical Chemistry I 3 CHEM 4448 Physical Chemistry I 4 CHEM 4448 Physical Chemistry I 3 CHEM 4450 Chemistry I 3 <td></td> <td>-</td> <td></td>		-	
& CHEM 2125and Organic Chemistry II: LabCHEM 2401Quantitative Analysis4CHEM 4100Chemical Literature Seminar1CHEM 4260Advanced Integrated Laboratory2CHEM 4367Advanced Integrated Laboratory3CHEM 4395Undergrad Research In Chem3CHEM 4440Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 6 advanced hours is required ⁴ 310Electives310CHEM 6 advanced hours is required ⁴ 10CHEM 7 advanced for the formation of the fo	CHEM 2323 & CHEM 2123		4
CHEM 2401Quantitative Analysis4CHEM 4100Chemical Literature Seminar1CHEM 4260Advanced Integrated Laboratory2CHEM 4260Advanced Integrated Laboratory3CHEM 4367Advanced Inorganic Chemistry3CHEM 4395Undergrad Research In Chem3CHEM 4440Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM Advanced elective ³ 33CHEM Advanced elective ³ 33CHEM Advanced elective ³ 33CHEM 4448Federater I3CHEM 4448Physical Chemistry I3CHEM 640Advanced hours is required ⁴ 3CHEM 640Semeral electives3CHEM 640Semeral electives7Cancered electives12-13CHEM 640Semeral electives12-13CHEM 740Semeral electives12-13CHEM 740Semeral electives12-13CHEM 740Semeral electives12-13CHEM 740Semeral electives12-13CHEM 740Semeral elect	CHEM 2325 & CHEM 2125		4
CHEM 4260Advanced Integrated Laboratory2CHEM 4367Advanced Inorganic Chemistry3CHEM 4395Undergrad Research In Chem3CHEM 440Instrumental Analytical Chem4CHEM 4440Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM 4448Physical Chemistry I3CHEM 4448Physical Chemistry I4CHEM Advanced elective ³ 3A minor, including 6 advanced hours is required ⁴ 10ElectivesGeneral electives7Advanced elective 12General electives7Advanced electives121212	CHEM 2401		4
CHEM 4367Advanced Inorganic Chemistry3CHEM 4395Undergrad Research In Chem3CHEM 4440Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM Advanced elective ³ 3-4CHEM Advanced elective ³ 3-4Minor (if required)3-4A minor, including 6 advanced hours is required ⁴ 10Electives7General electives7Advanced electives12-13	CHEM 4100	Chemical Literature Seminar	1
CHEM 4367Advanced Inorganic Chemistry3CHEM 4395Undergrad Research In Chem3CHEM 4440Instrumental Analytical Chem4CHEM 4448Physical Chemistry I4CHEM Advanced elective ³ 3-4CHEM Advanced elective ³ 3-4Minor (if required)3-4A minor, including 6 advanced hours is required ⁴ 10Electives7General electives7Advanced electives12-13	CHEM 4260	Advanced Integrated Laboratory	2
CHEM 4440 Instrumental Analytical Chem 4 CHEM 4448 Physical Chemistry I 4 CHEM Advanced elective ³ 3-4 Minor (if required) 3-4 A minor, including 6 advanced hours is required ⁴ 10 Electives 7 General electives 7 Advanced electives 12-13	CHEM 4367	Advanced Inorganic Chemistry	3
CHEM 4440 Instrumental Analytical Chem 4 CHEM 4448 Physical Chemistry I 4 CHEM Advanced elective ³ 3-4 Minor (if required) 3-4 A minor, including 6 advanced hours is required ⁴ 10 Electives 7 General electives 7 Advanced electives 12-13	CHEM 4395	Undergrad Research In Chem	3
CHEM Advanced elective ³ 3-4 Minor (if required) A minor, including 6 advanced hours is required ⁴ 10 Electives General electives 7 Advanced electives 12-13	CHEM 4440		4
Minor (if required) A minor, including 6 advanced hours is required 4 10 Electives 7 General electives 7 Advanced electives 12-13	CHEM 4448	Physical Chemistry I	4
Minor (if required) A minor, including 6 advanced hours is required 4 10 Electives 7 General electives 7 Advanced electives 12-13	CHEM Advanced elective	e ³	3-4
Electives 7 General electives 7 Advanced electives 12-13	Minor (if required)		
Electives 7 General electives 7 Advanced electives 12-13		anced hours is required ⁴	10
Advanced electives 12-13	Electives		
	General electives		7
	Advanced electives		12-13
	Total Hours		120

¹ MATH 1420 satisfies the Core Curriculum requirement for Component Area II (mathematics), the one semester credit hour Core Curriculum requirement for Component Area IX (Component Area Option), and the Degree Specific requirement.

² CHEM 1411 and CHEM 1412 satisfy the Core Curriculum requirement for Component Area III (Life and Physical Science) requirement and the Major requirement.

³ CHEM 3361, CHEM 3367, CHEM 3368, CHEM 3438, CHEM 4442, and CHEM 4443 are recommended.

⁴ A minor in MATH, for instance, only requires 10 additional hours beyond MATH 1420 and MATH 1430.

Notes

- 1. A grade of C or higher is required for CHEM 1411, CHEM 1412, CHEM 2323, CHEM 2123, CHEM 2325, CHEM 2125, CHEM 2401, and CHEM 4448, and in all required Physics and Mathematics courses.
- 2. A minor generally requires six semesters of coursework, a minimum of 18 credits (six advanced) in an approved field. Students should use elective and minor hours to satisfy the 42 advanced hour requirement.

First Year		
Fall	Hours Spring	Hours
CHEM 1411 ¹	4 CHEM 1412 ¹	4
ENGL 1301 ²	3 ENGL 1302 ²	3
HIST 1301 ³	3 HIST 1302 ³	3
MATH 1420 ⁴	4 MATH 1430	4
Elective ⁵	3	
	17	14
Second Year		
Fall	Hours Spring	Hours
Component Area IV	3 CHEM 2325	3
CHEM 2123	1 CHEM 2125	1
CHEM 2323	3 ENGL 3330	3
CHEM 2401	4 Minor Course ⁶	4
PHYS 1101	1 PHYS 1102	1
PHYS 1301	3 PHYS 1302	3
	15	15
Third Year		
Fall	Hours Spring	Hours
CHEM 4448	4 Component Area IX	3
Elective (Advanced)	3 CHEM Advanced Elective ⁸	3-4
Elective	2 Elective (Advanced)	3-4
POLS 2305 ⁷	3 Elective	3
Minor Course (Advanced) ⁶	3 POLS 2306 ⁷	3
	15	16
Fourth Year		
Fall	Hours Spring	Hours
Component Area VIII	3 Component Area V	3
CHEM 4100	1 CHEM 4260	2
CHEM 4440	4 CHEM 4367	3
Elective (Advanced)	3 CHEM 4395	3
Minor Course (Advanced) ⁶	3 Elective (Advanced)	3
	14	14

Total Hours: 120

¹ Satisfies Core Curriculum requirement for Component Area III (Life and Physical Science).

² Satisfies Core Curriculum requirement for Component Area I (Communications).

³ Satisfies Core Curriculum requirement for Component Area VI (U.S. History).

⁴ Satisfies Core Curriculum requirement for Component Area II (Mathematics).

⁵ UNIV 1301 or another elective.

⁶ A minor requires 6 semester credit hours of coursework, a minimum of 18 semester credit hours (6 advanced) in an approved field.

⁷ Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).

⁸ CHEM 3361, CHEM 3367, CHEM 3368, CHEM 3438, CHEM 3339, CHEM 4442, CHEM 4443 are recommended.

Notes

- 1. A grade of C or higher is required for CHEM 1411, CHEM 1412, CHEM 2323, CHEM 2123, CHEM 2325, CHEM 2125, CHEM 2401, and CHEM 4448, and in all required Physics and Mathematics courses.
- 2. Students should use elective and minor hours to satisfy the 42-advanced hour requirement. Advanced hours are 3000 and 4000-level courses.