

## B.S. in Chemistry 2022-2023 Option 1 - CWILT

FIRST YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">CHE 113</a> & <a href="#">CHE 113D</a> General Chemistry I and General Chemistry I Lab *1	4	<a href="#">GES 125 Introduction to the Creative Arts</a>	4	<a href="#">CHE 214</a> & <a href="#">CHE 215</a> (or elective) General Chemistry II General Chemistry II Lab *1	4
OR				<a href="#">MAT 124M Calculus 1</a>	4
<a href="#">CHE 208</a> & <a href="#">CHE 208D</a> Accelerated General Chemistry and Accelerated General Chemistry Lab *1				<a href="#">CHE200 Laboratory Safety and Chemical Hygiene</a>	1
<a href="#">MAT123M Precalculus</a>	3			<a href="#">BIB 101 Introduction to the Bible</a>	3
<a href="#">GES 130 Christianity Western Culture</a>	4			<a href="#">GES 140 Introduction to Wellbeing</a>	3
<a href="#">GES 160 Inquiry Seminar</a>	3				
	14		4		15
SECOND YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">CHE 224</a> & <a href="#">CHE 225</a> Organic Chemistry I and Organic Chemistry I Lab	4	Second Language (S) course *2	4	<a href="#">CHE 226</a> & <a href="#">CHE 227</a> Organic Chemistry II and Organic Chemistry II Lab	4
<a href="#">MAT 222 Differential Equations or MAT 223 Multivariable Calculus</a>	3			<a href="#">PHY 296</a>	4
<a href="#">PHY 292</a> & <a href="#">PHY 292D</a> General Physics I and General Physics I Lab	4			<a href="#">&amp; PHY 297</a> General Physics II and General Physics II Lab	
<a href="#">MAT 125 Calculus 2</a>	4			<a href="#">THE 201 Christian Theology</a>	3
	15		4	Contemporary Western Life and Thought (L) course	3
					14
THIRD YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">CHE 395 Chemistry Seminar: Research and Professional Development</a>	1	Science, Technology, and Society (K) course	3	<a href="#">CHE 312</a> & <a href="#">CHE 313</a> Quantitative Analysis and Quantitative Analysis Lab	4
<a href="#">CHE 344</a> & <a href="#">CHE 345</a> Thermodynamics, Kinetics, and Statistical Mechanics and Thermodynamics, Kinetics, and Statistical Mechanics Lab Chemistry Elective	4			<a href="#">CHE 348</a> & <a href="#">CHE 349</a> Quantum Chemistry and Spectroscopy and Quantum Chemistry and Spectroscopy Lab	4
Interpreting Biblical Themes (J) course	3			<a href="#">CHE 490 Chemistry Seminar: Research</a>	2
World Cultures (U) course	3			Comparative Systems (G) course	3
	15		3	Leisure and Lifetime Sports (Q) course	1
					14
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
<a href="#">CHE 320</a> & <a href="#">CHE 321</a> Instrumental Analysis and Instrumental Analysis Lab	4	Interim Off	0	<a href="#">CHE 364</a> & <a href="#">CHE 365</a> Advanced Inorganic Chemistry and Advanced Inorganic Chemistry Lab	4
<a href="#">CHE 388</a> & <a href="#">CHE 389</a> Biochemistry I and Biochemistry I Lab	4			<a href="#">CHE 494 Chemistry Seminar: Research Presentation</a>	1
Cross-cultural Experience (Z) course	0-3			Chemistry Elective	4
Electives	4			Artistic Experience (A) course	0-3
				Contemporary Christian Issues (P) course	3
	*12-15		0		*12-15
<b>Total Credits 122-128</b>					

\*1. [CHE 208/CHE 208D](#) is a one-semester course that meets the requirements of [CHE 113/CHE 113D](#) and [CHE 214/CHE 215](#). Students taking [CHE 208/CHE 208D](#) may choose an elective in the Spring of their Freshman year.

\*2. Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)

This program assumes a student will use [CHE 113 General Chemistry I/CHE 113D General Chemistry I Lab](#) and [MAT 124M Calculus 1](#) to meet the General Education Laboratory Science (D) and Mathematics (M) course requirements.

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)

## B.S. in Chemistry 2022-2023: Option 2 - Humanities

FIRST YEAR						
Fall	Credits	Interim	Credits	Spring	Credits	Credits
<a href="#">CHE 113 &amp; CHE 113D</a> General Chemistry I and General Chemistry I Lab *1	4	<a href="#">GES 147 Humanities II: Renaissance and Reformation</a>	4	<a href="#">CHE 214 &amp; CHE 215</a> (or elective) General Chemistry II General Chemistry II Lab *1	4	4
OR				<a href="#">MAT 124M Calculus 1</a>		4
<a href="#">CHE 208 &amp; CHE 208D</a> Accelerated General Chemistry and Accelerated General Chemistry Lab *1				<a href="#">GES244 Humanities III: European Enlightenment and American Culture to 1878</a>		4
				Second Language (S) course *2		4
<a href="#">MAT123M Precalculus</a>	3					
<a href="#">GES 140 Introduction to Wellbeing</a>	3					
<a href="#">GES 145 Humanities I: Greco-Roman through Middle Ages</a>	4					
	14		4			16
SECOND YEAR						
Fall	Credits	Interim	Credits	Spring	Credits	Credits
<a href="#">CHE 224 &amp; CHE 225</a> Organic Chemistry I and Organic Chemistry I Lab	4	World Cultures (U) course	3	<a href="#">BIB 101 Introduction to the Bible</a>	3	3
<a href="#">MAT 222 Differential Equations or MAT 223 Multivariable Calculus</a>	3			<a href="#">CHE 200 Laboratory Safety and Chemical Hygiene</a>		1
<a href="#">PHY 292 &amp; PHY 292D</a> General Physics I and General Physics I Lab	4			<a href="#">CHE 226 &amp; CHE 227</a> Organic Chemistry II and Organic Chemistry II Lab		4
<a href="#">GES 246 Humanities IV: Modern and Contemporary Western Culture</a>	4			<a href="#">PHY 296 &amp; PHY 297</a> General Physics II and General Physics II Lab		4
				<a href="#">MAT 125 Calculus 2</a>		4
	15		3			16
THIRD YEAR						
Fall	Credits	Interim	Credits	Spring	Credits	Credits
<a href="#">CHE 344 &amp; CHE 345</a> Thermodynamics, Kinetics, and Statistical Mechanics and Thermodynamics.	4	Science, Technology, and Society (K) course	3	<a href="#">CHE 312 &amp; CHE 313</a> Quantitative Analysis and Quantitative Analysis Lab		4
<a href="#">CHE 395 Chemistry Seminar: Research and Professional Development</a>	1			<a href="#">CHE 348 &amp; CHE 349</a> Quantum Chemistry and Spectroscopy and Quantum Chemistry and Spectroscopy Lab		4
Interpreting Biblical Themes (J) course	3			<a href="#">CHE 490 Chemistry Seminar: Research</a>		2
Elective	4			Comparative Systems (G) course		3
				Leisure and Lifetime Sports (Q) course		1
	12		3			14
FOURTH YEAR						
Fall	Credits	Interim	Credits	Spring	Credits	Credits
<a href="#">CHE 320 &amp; CHE 321</a> Instrumental Analysis and Instrumental Analysis Lab	4	Interim Off		<a href="#">CHE 364 &amp; CHE 365</a> Advanced Inorganic Chemistry and Advanced Inorganic Chemistry Lab		4
<a href="#">CHE 388 &amp; CHE 389</a> Biochemistry I and Biochemistry I Lab	4			<a href="#">CHE 494 Chemistry Seminar: Research Presentation</a>		1
Chemistry Elective	4			Chemistry Elective		4
Cross Cultural Experience (Z) course	0-3			Artistic Experience (A) course		0-3
				Contemporary Christian Issues (P) course		3
	*12-15		0			*12-15
<b>Total Credits 121-127</b>						
<p>*1. <a href="#">CHE 208/CHE 208D</a> is a one-semester course that meets the requirements of <a href="#">CHE 113/CHE 113D</a> and <a href="#">CHE 214/CHE 215</a>. Students taking <a href="#">CHE 208/CHE 208D</a> may choose an elective in the Spring of their Freshman year.</p>						
<p>*2. Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)</p>						
<p>This program assumes a student will use <a href="#">CHE 113 General Chemistry I/CHE 113D General Chemistry I Lab</a> and <a href="#">MAT 124M Calculus 1</a> to meet the General Education Laboratory Science (D) and Mathematics (M) course requirements.</p>						
<p>Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)</p>						