B.S. in Biochemistry/Molecular Biology 2017-2018: Option 1 - CWILT

First Year					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
BIO120 & BIO121 Introduction to Molecular and Cellular Biology and Introduction to Molecular and Cellular Biology Lab	4	GES160 Inquiry Seminar	3	BIO122 & 122D Introduction to Organismic Biology and Introduction to Organismic Biology Lab	4
CHE113 & 113D (or CHE208/208D Accelerated General Chemistry/Lab) General Chemistry I & General Chemistry I Lab *1, *3	4			CHE214 & CHE215 (or elective if CHE208/208D was taken in fall) General Chemistry II & General Chemistry II Lab *3	4
MAT124M Calculus 1 *1	4			MAT125 Calculus 2	4
GES140 Introduction to Wellbeing	3			GES130 Christianity Western Culture	4
	15		**3**		**16**
Second Year					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
CHE224 & CHE225 Organic Chemistry I and Organic Chemistry I Lab	4	BIB101 Introduction to the Bible	3	CHE226 & CHE227 Organic Chemistry II and Organic Chemistry II Lab	4
PHY292 & 292D General Physics I	4			PHY296 & PHY297 General Physics II and General Physics II Lab	4
GES125 Introduction to the Creative Arts	4			CHE312 & CHE313 Quantitative Analysis and Quantitative Analysis Lab	4
				Second Language (S) course[2]	4
	12		**3**		**16**
Third Year					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
BIO332 & BIO333 Genetics and Genetics Lab	4	Science, Technology and Society (K) course	3	BIO354 & BIO355 Cell Biology and Cell Biology Lab	4
BIO388 & BIO389 Biochemistry I and Biochemistry I Lab	4			CHE396 & CHE397 Biochemistry II and Biochemistry II Lab	4
CHE344 & CHE345 Thermodynamics, Kinetics, and Statistical Mechanics and Thermodynamics, Kinetics, and Statistical Mechanics Lab	4			Biology or Chemistry Seminar/Research[4]	1
THE201 Christian Theology	3			Contemporary Western Life and Thought (L) course	3
Biology or Chemistry Seminar/Research[4]	1				
	16		**3**		**12**
Fourth Year					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
Biology or Chemistry Seminar/Research[4]	1	Interim Off		BIO396 & BIO397 Molecular Biology and Molecular Biology Lab	4
Elective (BIO224/225 recommended)	4			Biology or Chemistry Seminar/Research[4]	1
World Cultures (U) course	3			Comparative Systems (G) course	3
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
Leisure and Lifetime Sports (Q) course	1			Elective	3
Cross Cultural Experience (Z) course	0-3			Artistic Experience (A) course	0-3
	15-Dec		**0**		**14-17**
Total Credits: 122-128					

*1. This program assumes a student will use CHE113D and MAT124M to meet the general education laboratory science and Mathematics requirements.
*2. Students must complete through the second semester of a first year language course or equivalent.
*3. CHE208/CHE208D is a one-semester course that meets the requirements for CHE113/CHE113D and CHE214/CHE215. Students taking CHE208/CHE208D may choose an elective in the spring of their freshmen year
*4. Choose either the Biology Seminar/Research series (BIO339, BIO495, BIO496, BIO499) or Chemistry Seminar/Research series (CHE395, CHE490 and CHE494). Students pursuing the ACS-accredited B.S. must complete the chemistry series

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants 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 Biochemistry/Molecular Biology 2017-2018: Option 2 - Humanities

First Year					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
BIO120 & BIO121 Introduction to Molecular and Cellular Biology and Introduction to Molecular and Cellular Biology Lab	4	GES147 Humanities II: Renaissance and Reformation	4	BIO122 & 122D Introduction to Organismic Biology and Introduction to Organismic Biology Lab	4
CHE113 & 113D (or CHE208/208D Accelerated General Chemistry/Lab) General Chemistry I & General Chemistry I Lab *1, *3	4			CHE214 & CHE215 (or elective if CHE208/208D was taken in fall) General Chemistry II & General Chemistry II Lab *3	4
MAT124M1 Calculus 1	4			MAT125 Calculus 2	4
GES145 Humanities I: Greco-Roman through Middle Ages	4			GES244 Humanities III: European Enlightenment and American Culture to 1877	4
	16		**4**		**16**
Second Year					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
CHE224 & CHE225 Organic Chemistry I and Organic Chemistry I Lab	4	GES140 Introduction to Wellbeing	3	CHE226 & CHE227 Organic Chemistry II and Organic Chemistry II Lab	4
PHY292 & 292D General Physics I	4			PHY296 & PHY297 General Physics II and General Physics II Lab	4
GES246 Humanities IV: Modern and Contemporary Western Culture	4			CHE312 & CHE313 Quantitative Analysis and Quantitative Analysis Lab	4
				Second Language (S) course[2]	4
	12		**3**		**16**
Third Year					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
BIO332 & BIO333 Genetics and Genetics Lab	4	Science, Technology and Society (K) course	3	BIB101 Introduction to the Bible	3
BIO388 & BIO389 Biochemistry I and Biochemistry I Lab				BIO354 & BIO355 Cell Biology and Cell Biology Lab	4
or	4			CHE396 & CHE397 Biochemistry II and Biochemistry II Lab	4
CHE388 & CHE389 Biochemistry I and Biochemistry I Lab				Biology or Chemistry Seminar/Research[4]	1
CHE344 & CHE345Thermodynamics, Kinetics, and Statistical Mechanics and Thermodynamics, Kinetics, and Statistical Mechanics Lab	4			World Cultures (U) course	3
Biology or Chemistry Seminar/Research[3]	1				
	13		**3**		**15**
Fourth Year					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
Biology or Chemistry Seminar/Research[4]	1	Interim Off		BIO396 & BIO397 Molecular Biology and Molecular Biology Lab	4
Elective (BIO224/225 recommended)	4			Biology or Chemistry Seminar/Research[4]	1
Comparative Systems (G) course	3			Contemporary Christian Issues (P) course	3
Interpreting Biblical Themes (J) course	3			Artistic Experience (A) course	0-3
Leisure and Lifetime Sports (Q) course	1			Elective	4
Cross Cultural Experience (Z) course	0-3				
	15-Dec		**0**		**15-Dec**
Total Credits: 122-128					

*1. This program assumes a student will use CHE113D and MAT124M to meet the general education laboratory science and Mathematics requirements.
*2. Students must complete through the second semester of a first year language course or equivalent.
*3. CHE208/CHE208D is a one-semester course that meets the requirements for CHE113/CHE113D and CHE214/CHE215. Students taking CHE208/CHE208D may choose an elective in the spring of their freshmen year.
*4. Choose either the Biology Seminar/Research series (BIO339, BIO495, BIO496, BIO499) or Chemistry Seminar/Research series (CHE395, CHE490 and CHE494). Students pursuing the ACS-accredited B.S. must complete the chemistry series

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