B.S. in Mathematics and Data Science 2019-2020: Option 1- CWILT

FIRST YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 100Introduction to Programming	3	GES 160 Inquiry Seminar	3	COS 105Computer Science 1	4
MAT 124M1Calculus 1	4			BIB 101Introduction to the Bible	3
GES 140Introduction to Wellbeing	3			GES 130Christianity Western Culture	4
GES 125Introduction to the Creative Arts	4			MAT 125 Calculus 2	4
	14		3		15
SECOND YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
MAT 223Multivariable Calculus	3	Contemporary Western Life and Thought (L) course	3	MAT 211 Linear Algebra	3
MAT 241 Discrete Mathematics	3			MAT 222Differential Equations	3
COS 212Computer Science 2	4			COS 216 Data Structures and Algorithms	3
Laboratory Science (D) course	4			THE 201 Christian Theology	3
				Second Language (S) course ²	4
	14		3		16
THIRD YEAR	·		-		
Fall	Credits	Interim	Credits	Spring	Credits
MAT 330Probability and Statistics	3	Interim Off		MAT 310 Algebraic Structures	4
MAT 376Operations Research	4			MAT 344Numerical Methods	3
Science, Technology, and Society (K) course	3			MAT 331 Applied Statistics	3
World Cultures (U) course	3			COS 334 Data Mining and Machine Learning	3
Cross-Cultural Experience (Z) course	0-3			Artistic Experience (A) course	0-3
	13-16		0		13-17
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 313 Database Systems	3	MAT 499Foundations of Mathematics	3	BUS 317 Business Analytics	4
MAT 422 Real Analysis	3			Electives	6
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
Comparative Systems (G) course	3			Leisure and Lifetime Sports (Q) course	1
Elective	3				
	15		3		14
Total Credits 123-130					

1. This program assumes students will use MAT 124M to meet the general education Mathematics requirement.

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.

^{2.} Students must complete through the second semester of a first year language course or equivalent (check the catalog for details).

B.S. in Mathematics and Data Science 2019-2020: Option 2- Humanities

FIRST YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 100Introduction to Programming	3	GES 147Humanities II: Renaissance and Reformation	4	BIB 101Introduction to the Bible	3
MAT 124M1Calculus 1	4			COS 105Computer Science 1	4
GES 140Introduction to Wellbeing	3			MAT 125 Calculus 2	4
GES 145Humanities I: Greco-Roman through Middle Ages	4			GES 244Humanities III: European Enlightenment and American Culture to 1877	4
	14		4		15
SECOND YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
MAT 223Multivariable Calculus	3	Laboratory Science (D) course	4	MAT 211 Linear Algebra	3
MAT 241 Discrete Mathematics	3		-	MAT 222Differential Equations	3
COS 212 Computer Science 2	4			COS 216 Data Structures and Algorithms	3
GES 246Humanities IV: Modern and Contemporary Western Culture	4			Second Language (S) course ²	4
	14		4		13
THIRD YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
MAT 330Probability and Statistics	3	Interim Off		MAT 310 Algebraic Structures	4
MAT 376Operations Research	4			MAT 344Numerical Methods	3
Science, Technology, and Society (K) course	3			MAT 331 Applied Statistics	3
World Cultures (U) course	3			COS 334 Data Mining and Machine Learning	3
Cross-Cultural Experience (Z) course	0-3			Artistic Experience (A) course	0-3
	13-16		0		13-17
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 313 Database Systems	3	MAT 499Foundations of Mathematics	3	BUS 317 Business Analytics	4
MAT 422 Real Analysis	3			Electives	6
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
Comparative Systems (G) course	3			Leisure and Lifetime Sports (Q) course	1
Elective	3				
	15		3		14
	10				

^{1.} This program assumes students will use MAT 124M to meet the general education Mathematics requirement.

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.

^{2.} Students must complete through the second semester of a first year language course or equivalent (check the catalog for details).