

B.S. in Computer Science 2019-2020: Option 1 - CWILT

FIRST YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 100 or 205 Introduction to Programming or Scientific Computing	3	GES 160 Inquiry Seminar	3	COS 105 Computer Science 1	4
MAT 124M Calculus 1	4			MAT 125 Calculus 2	4
GES 130 Christianity Western Culture	4			BIB 101 Introduction to the Bible	3
GES 140 Introduction to Wellbeing	3			Second Language (S) course ¹	4
	14		3		15
SECOND YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 212 Computer Science 2	4	THE 201 Christian Theology	3	COS 214 Computer Architecture	4
MAT 241 Discrete Mathematics	3			COS 216 Data Structures and Algorithms	3
GES 125 Introduction to the Creative Arts	4			MAT 211 Linear Algebra	3
Laboratory Science (D) course	4			Contemporary Western Life and Thought (L) course	3
				Elective	3
	15		3		16
THIRD YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 301 Operating Systems	4	COS 450 (Interim, even # years) Humans and Computers	3	COS 371 (spring, even years) Organization of Programming Languages	3
COS 320 (fall, odd # years) Computer Graphics Programming	3				3
COS 318 Web Programming	3			Interpreting Biblical Themes (J) course	3
COS 477 Software Engineering	3			Cross-Cultural Experience (Z) course	0-3
World Cultures (U) course	3			Electives	6
	16		3		12-15
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 313 Database Systems	3	Interim off	0	COS 386 Data Communications and Computer Networks	3
MAT 330 Probability and Statistics	3			Science, Technology, and Society (K) course	3
Comparative Systems (G) course	3			Contemporary Christian Issues (P) course	3
Leisure and Lifetime Sports (Q) course	1			Artistic Experience (A) course	0-3
Elective ²	3-4			Elective ²	3
				COS 389 Artificial Intelligence	3
	13-14		0		15-18
Total Credits 125-132					

- Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)
- Choose one of: [MAT 344](#), [MAT 376](#), or [PHY 352/PHY 353](#) (Note: [PHY 352/PHY 353](#) will require consent of instructor unless prerequisites are satisfied. Please see catalog for details.)

This program assumes a student will use [MAT 124M](#) and [GES 334K](#) to meet the general education Mathematics and Science, Technology, and Society 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 Computer Science 2019-2020: Option 2 - Humanities

FIRST YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 100 or 205 Introduction to Programming or Scientific Computing	3	GES 147 Humanities II: Renaissance and Reformation	4	COS 105 Computer Science 1	4
MAT 124M Calculus 1	4			MAT 125 Calculus 2	4
GES 140 Introduction to Wellbeing	3			GES 244 Humanities III: European Enlightenment and American Culture to 1877	4
GES 145 Humanities I: Greco-Roman through Middle Ages	4			Second Language (S) course ¹	4
	14		4		16
SECOND YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 212 Computer Science 2	4	World Cultures (U) course	3	COS 214 Computer Architecture	4
MAT 241 Discrete Mathematics	3			COS 216 Data Structures and Algorithms	3
BIB 101 Introduction to the Bible	3			MAT 211 Linear Algebra	3
GES 246 Humanities IV: Modern and Contemporary Western Culture	4			Laboratory Science (D) course	4
				Leisure and Lifetime Sports (Q) course	1
	14		3		15
THIRD YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 301 Operating Systems	4	COS 450 (Interim, even # years) Humans and Computers	3	Interpreting Biblical Themes (J) course	3
COS 320 (Fall, odd # years) Computer Graphics Programming	3			COS 371 (Spring, even # years) Organization of Programming Languages	3
COS 318 Web Programming	3				3
COS 477 (Fall, odd # years) Software Engineering	3			Elective	3
World Cultures (U) course	3			Cross-Cultural Experience (Z) course	3
	16		3		15
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 313 (fall, even years) Database Systems	3	Interim Off	0	COS 386 (Spring, odd # years) Communications and Computer Science, Technology, and Society (K) course	3
MAT 330 Probability and Statistics	3			Contemporary Christian Issues (P) course	3
Electives ²	6			Artistic Experience (A) course	0-3
Comparative Systems (G) course	3			Elective ²	3
				COS 389 (Spring, odd # years) Artificial Intelligence	3
	15		0		15-18
Total Credits 127-130					

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

2. Choose one of: [MAT 344](#), [MAT 376](#), or [PHY 352/PHY 353](#) (Note: [PHY 352/PHY 353](#) will require consent of instructor unless prerequisites are satisfied. Please see catalog for details.)

This program assumes a student will use [MAT 124M](#) and [GES 334K](#) to meet the general education Mathematics and Science, Technology, and Society 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.)