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

FIRST YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
GES 140Introduction to Wellbeing	3	ENR 160Introduction to Engineering	3	COS 205 Scientific Computing	3
GES 160 Inquiry Seminar	3			GES 130Christianity Western Culture	4
MAT 124M Calculus 1	4			MAT 125 Calculus 2	4
PHY 292 & PHY 292D General Physics I and General Physics I Lab	4			PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
	14		**3**		**15**
SECOND YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
COS 212 Computer Science 2	4	GES 125Introduction to the Creative Arts	4	COS 214 Computer Architecture	4
MAT 223Multivariable Calculus	3			COS 216 Data Structures and Algorithms	3
MAT 241 Discrete Mathematics	3			MAT 222Differential Equations	3
PHY 260 Careers in Engineering and Physics Seminar	1			PHY 352 Computer Methods in Physics and Engineering	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			Contemporary Western Life and Thought (L) course	3
	15		**4**		**16**
THIRD YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
BIB 101Introduction to the Bible	3	COS 450 Humans and Computers	3	Second Language (S) course[1]	4
COS 301 Operating Systems	4			ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	4
ENR 316 & ENR 317 Analog Circuitry and Design and Analog Circuitry Design Lab	4			MAT 211 Linear Algebra	3
MAT 330Probability and Statistics	3			THE 201 Christian Theology	3
				Comparative Systems (G) course	3
	14		**3**		**17**
FOURTH YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 336 Signals and Systems	4	Cross-cultural experience (Z) course	0-3	ENR 490Engineering Design Project	3
ENR 436 & ENR 437 Microprocessors and Microprocessors Lab	4			Artistic Experience (A) course (0-3 credits)	0-3
ENR 465Engineering Design Seminar	1			Science, Technology, and Society (K) course	3
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
Leisure and Lifetime Sports (Q) course	1			COS 386 Data Communications and Computer Networks	3
	13		**0-3**		**12-15**
Total Credits 126-132					

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

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 Engineering 2019-2020: Option 2 - Humanities

FIRST YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
GES 140Introduction to Wellbeing	3	GES 147Humanities II: Renaissance and Reformation	4	GES 244Humanities III: European Enlightenment and American Culture to 1877	4
GES 145Humanities I: Greco-Roman through Middle Ages	4			COS 205 Scientific Computing	3
MAT 124M Calculus 1	4			MAT 125 Calculus 2	4
PHY 292 & PHY 292D General Physics I and General Physics I Lab	4			PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
	15		**4**		**15**
SECOND YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
COS 212 Computer Science 2	4	ENR 160Introduction to Engineering	3	COS 214 Computer Architecture	4
GES 246Humanities IV: Modern and Contemporary Western Culture	4			COS 216 Data Structures and Algorithms	3
MAT 223Multivariable Calculus	3			MAT 222Differential Equations	3
MAT 241 Discrete Mathematics	3			PHY 352 Computer Methods in Physics and Engineering	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			Leisure and Lifetime Sports (Q) course	1
	18		**3**		**14**
THIRD YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
COS 301 Operating Systems	4	COS 450 Humans and Computers	3	BIB 101Introduction to the Bible	3
ENR 316 & ENR 317 Analog Circuitry and Design and Analog Circuitry Design Lab	4			Second Language (S) course[1]	4
				ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	4
				MAT 211 Linear Algebra	3
MAT 330Probability and Statistics	3				
PHY 260 Careers in Engineering and Physics Seminar	1				3
	12		**3**		**14**
FOURTH YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 336 Signals and Systems	4	Cross-cultural experience (Z) course	0-3	ENR 490Engineering Design Project	3
ENR 436 & ENR 437 Microprocessors and Microprocessors Lab	4			Artistic Experience (A) course (0-3 credits)	0-3
ENR 465Engineering Design Seminar	1			Science, Technology, and Society (K) course	3
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
				COS 386 Data Communications and Computer Networks	3
	12		**0-3**		**12-15**
Total Credits 122-128					

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

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.