B.S. in Computer Engineering 2018-2019: Option 1 - CWILT

First Year

Fall	Credits	Interim	Credits	Spring	Credits
MAT 124M Calculus 1	4	ENR 160 Introduction to Engineering	3	MAT 125 Calculus 2	4
PHY 292 & PHY 292D General Physics I and General Physics I Lab	4			COS 205 Scientific Computing	3
GES 140 Introduction to Wellbeing	3			PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
GES 160 Inquiry Seminar	3			GES 130 Christianity Western Culture	4
	14		3		15

Second Year

Fall	Credits	Interim	Credits	Spring	Credits
PHY 260 Careers in Engineering and Physics Seminar	1	GES 125 Introduction to the Creative Arts	4	MAT 222 Differential Equations	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			COS 214 Computer Architecture	4
COS 212 Computer Science 2	4			COS 216 Data Structures and Algorithms	3
MAT 223 Multivariable Calculus	3			PHY 352 Computer Methods in Physics and Engineering	3
MAT 241 Discrete Mathematics	3			Contemporary Western Life and Thought (L) course	3
	15		4		16

Third Year

Fall	Credits	Interim	Credits	Spring	Credits
MAT 330 Probability and Statistics	3	Cross-cultural experience (Z) course	0-3	MAT 211 Linear Algebra	3
COS 301 Operating Systems	4			COS 386 Data Communications and Computer Networks	3
BIB 101 Introduction to the Bible	3			ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	4
ENR 336 (fall, even years) Signals and Systems	4			THE 201 Christian Theology	3
				Comparative Systems (G) course	3
	14		0-3		16

Fourth Year

Fall	Credits	Interim	Credits	Spring	Credits
ENR 316 & ENR 317 Analog Circuitry and Design and Analog Circuitry Design Lab	4	COS 450 Humans and Computers	3	ENR 490 Engineering Design Project	3
ENR 436 & ENR 437 Microprocessors and Microprocessors Lab	4			Second Language (S) course*1	4
ENR 465 Engineering 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			Artistic Experience (A) course (0-3 credits)	1
	13		3		14

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.)

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 2018-2019: Option 2 - Humanities

First Year

Fall	Credits	Interim	Credits	Spring	Credits
MAT 124M Calculus 1	4	GES 147 Humanities II: Renaissance and Reformation	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			PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
PHY 292 & PHY 292D General Physics I and General Physics I Lab	4			COS 205 Scientific Computing	3
	15		**4**		**15**

Second Year

Fall	Credits	Interim	Credits	Spring	Credits
MAT 223 Multivariable Calculus	3	ENR 160 Introduction to Engineering	3	PHY 352 Computer Methods in Physics and Engineering	3
MAT 241 Discrete Mathematics	3			MAT 222 Differential Equations	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			COS 214 Computer Architecture	4
GES 246 Humanities IV: Modern and Contemporary Western Culture	4			Leisure and Lifetime Sports (Q) course	1
COS 212 Computer Science 2	4			COS 216 Data Structures and Algorithms	3
	18		**3**		**14**

Third Year

Fall	Credits	Interim	Credits	Spring	Credits
COS 301 Operating Systems	4	Cross-cultural experience (Z) course	0-3	MAT 211 Linear Algebra	3
ENR 336 Signals and Systems	4			COS 386 Data Communications and Computer Networks	3
MAT 330 Probability and Statistics	3			BIB 101 Introduction to the Bible	3
PHY 260 Careers in Engineering and Physics Seminar	1			ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	4
	12		**0-3**		**13**

Fourth Year

Fall	Credits	Interim	Credits	Spring	Credits
ENR 316 & ENR 317 Analog Circuitry and Design and Analog Circuitry Design Lab	4	COS 450 Humans and Computers	3	ENR 490 Engineering Design Project	3
ENR 436 & ENR 437 Microprocessors and Microprocessors Lab	4			Second Language (S) course*1	4
ENR 465 Engineering Design Seminar	1			Science, Technology, and Society (K) course	3
Interpreting Biblical Themes (J) course	3			Contemporary CHristian Issues (P) course	3
				Artistic Experience (A) course (0-3 credits)	1
	12		**3**		**14**

Total Credits 123-126

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.)