B.S. in Electrical Engineering 2020-2021: Option 1 - CWILT

FIRST YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
GES 125 Introduction to the Creative Arts	4	GES 160 Inquiry Seminar	3	BIB 101 Introduction to the Bible	3
GES 140 Introduction to Wellbeing	3			GES 130 Christianity 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
				Artistic Experience (A) course	0-3
	15		**3**		**15-18**
SECOND YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
COS 205 Scientific Computing	3	ENR 160 Introduction to Engineering	3	ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	4
ENR 260 Careers in Engineering and Physics Seminar	1			MAT 223 Multivariable Calculus	3
MAT 224 Differential Equations with Linear Algebra	4			PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4
PHY 302 & PHY 303 Electronics and Electronics Lab	4			Science, Technology, and Society (K) course	3
Contemporary Western Life and Thought (L) course	3			Cross-cultural Experience (Z) Course	0-3
	15		**3**		**14-17**
THIRD YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 320 Mathematical Methods in Physics and Engineering	4	World Cultures (U) course	3	ENR 326 Circuit Analysis Simulations	4
ENR 336 Signals and Systems	4			ENR 352 & ENR 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
ENR 424 & ENR 425 Electronic Materials and Devices and Electronic Materials and Devices	4			ENR 446 & ENR 447 Control Systems and Control Systems Lab	4
ENR 436 & ENR 437 Microprocessors and Microprocessors Lab	4			THE 201 Christian Theology	3
	16		**3**		**15**
FOURTH YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 336 Signals and Systems	4	Interim Off		ENR 490 Engineering Design Project	3
ENR 424 & ENR 425 Electronic Materials and Devices and Electronic Materials and Devices Laboratory	4			PHY 332 & PHY 333 Optics and Optics Lab	4
ENR 436 & ENR 437 Microprocessors and Microprocessors Lab	4			Interpreting Biblical Themes (J) course	3
ENR 465 Engineering Design Seminar	1			Contemporary Christian Issues (P) course	3
Comparative Systems (G) Course	3			Leisure and Lifetime Sport (Q) course	1
				Second Language (S) course *1	4
	16		**0**		**18**
Total Credits 133-139					

*1. Students must complete through the second semester of a first year language course or equivalent.

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 Electrical Engineering 2020-2021: Option 2 - Humanities

FIRST YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
GES 140 Introduction to Wellbeing	3	GES 147 Humanities II: Renaissance and Reformation	4	BIB 101 Introduction to the Bible	3
GES 145 Humanities I: Greco-Roman through Middle Ages	4			GES 244 Humanities III: European Enlightenment and American Culture to 1877	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
Leisure and Lifetime Sport (Q) course	1				
	16		**4**		**15**
SECOND YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
MAT 224 Differential Equations with Linear Algebra	4	ENR 160 Introduction to Engineering	3	COS 205 Scientific Computing	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	4
GES 246 Humanities IV: Modern and Contemporary Western Culture	4			MAT 223 Multivariable Calculus	3
World Cultures (U) course	3			PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4
				Cross-cultural Experience (Z) course	0-3
	15		**3**		**14-17**
THIRD YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 320 Mathematical Methods in Physics and Engineering	4	Comparative Systems (G) course	3	ENR 326 Circuit Analysis Simulations	4
ENR 336 Signals and Systems	4			ENR 446 & ENR 447 Control Systems and Control Systems Lab	4
ENR 424 & ENR 425 Electronic Materials and Devices and Electronic Materials and Devices Laboratory	4			ENR 352 & ENR 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
ENR 436 & ENR 437 Microprocessors and Microprocessors Lab	4			THE 201 Christian Theology	3
	16		**3**		**15**
FOURTH YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 316 & ENR 317 Analog Circuitry and Design and Analog Circuitry Design Lab	4	Interim Off	0	ENR 490 Engineering Design Project	3
ENR 465 Engineering Design Seminar	1			PHY 332 & PHY 333 Optics and Optics Lab	4
PHY 400 Electricity and Magnetism	4			Artistic Experience (A) course	0-3
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
				Second Language (S) course *1	4
	12		**0**		**14-17**
Total Credits 127-133					

*1. Students must complete through the second semester of a first year language course or equivalent.

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.