B.S. in Applied Physics (Electronics Emphasis) 2020-2021: Option 1 CWILT

FIRST YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
PHY 292 & PHY 292D General Physics I and General Physics I Lab	4	GES 160 Inquiry Seminar	3	MAT 125 Calculus 2	4
MAT 124M Calculus 1	4			PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
GES 125 Introduction to the Creative Arts	4			GES 130 Christianity Western Culture	4
GES 140 Introduction to Wellbeing	3			BIB 101 Introduction to the Bible	3
	15		**3**		**15**
SECOND YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 260 Careers in Engineering and Physics Seminar	1	World Cultures (U) course	3	MAT 222 Differential Equations	3
MAT 223 Multivariable Calculus	3			PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4
COS 205 Scientific Computing	3			Science, Technology, and Society (K) course	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			Second Language (S) course *1	4
Contemporary Western Life & Thought (L) course	3			Cross-cultural Experience (Z) course	0-3
	14		**3**		**14-17**
THIRD YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
CHE 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab	4	Comparative Systems (G) course	3	ENR 326 Circuit Analysis Simulations	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
PHY 340 Mechanics	4			PHY 365 Physics Research Seminar	1
THE 201 Christian Theology	3			Elective	3
	15		**3**		**12**
FOURTH YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
PHY 490 Research	3	Interim Off		ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	4
PHY 320 Mathematical Methods in Physics and Engineering	4			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
				Leisure and Lifetime Sport (Q) course	1
	14		**0**		**15**
Total Credits 123-126					

*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 falls below 15 credits/semester. (Interim may be split between fall and spring for the state grant purposes only.)

B.S. in Applied Physics (Electronics Emphasis) 2020-2021: Option 2 Humanities

FIRST YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
PHY 292 & PHY 292D General Physics I and General Physics I Lab	4	GES 147 Humanities II: Renaissance and Reformation	4	PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
MAT 124M Calculus 1	4			MAT 125 Calculus 2	4
GES 145 Humanities I: Greco-Roman through Middle Ages	4			GES 244 Humanities III: European Enlightenment and American Culture to 1877	4
GES 140 Introduction to Wellbeing	3			BIB 101 Introduction to the Bible	3
	15		**4**		**15**
SECOND YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 260 Careers in Engineering and Physics Seminar	1	World Cultures (U) course	3	MAT 222 Differential Equations	3
MAT 223 Multivariable Calculus	3			PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4
GES 246 Humanities IV: Modern and Contemporary Western Culture	4			COS 205 Scientific Computing	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			Second Language (S) course *1	4
				Cross-cultural Experience (Z) course	0-3
	12		**3**		**14-17**
THIRD YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
CHE 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab	4	Comparative Systems (G) course	3	ENR 326 Circuit Analysis Simulations	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
PHY 340 Mechanics	4			PHY 365 Physics Research Seminar	1
Science, Technology, and Society (K) course	3			Elective	4
	15		**3**		**13**
FOURTH YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
PHY 320 Mathematical Methods in Physics and Engineering	4	Interim Off		ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	4
PHY 400 Electricity and Magnetism	4			PHY 332 & PHY 333 Optics and Optics Lab	4
PHY 490 Research	3			Artistic Experience (A) course	0-3
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3
				Leisure and Lifetime Sport (Q) course	1
				Elective	3
	14		**0**		**15-18**
Total Credits 123-129					

*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 falls below 15 credits/semester. (Interim may be split between fall and spring for the state grant purposes only.)