

B.S. in Physics 2018-2019: 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 125 Introduction to the Creative Arts	4	PHY 296 & PHY 297 General Physics II and General Physics II Lab	4		
MAT 124M Calculus 1	4			MAT 125 Calculus 2	4		
BIB 101 Introduction to the Bible	3			GES 130 Christianity Western Culture	4		
GES 160 Inquiry Seminar	3			GES 140 Introduction to Wellbeing	3		
	14				4		15
Second Year							
Fall	Credits	Interim	Credits	Spring	Credits		
PHY 302 & PHY 303 Electronics and Electronics Lab	4	World cultures (U) course	3	PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4		
MAT 223 Multivariable Calculus	3			PHY 352 & PHY 353 (or elective)*2	4		
				Computer Methods in Physics and Engineering Computer Methods in Physics and Engineering Lab			
COS 205 Scientific Computing	3			MAT 222 Differential Equations	3		
THE 201 Christian Theology	3			Second Language (S) course*1	4		
PHY 260 Careers in Engineering and Physics Seminar	1						
	14				3		15
Third Year							
Fall	Credits	Interim	Credits	Spring	Credits		
PHY 320 Mathematical Methods in Physics a	4	Science, Technology and Society (K) course	3	PHY 332 & PHY 333 (or elective)*3 Optics Optics Lab	4		
PHY 340 Mechanics	4			PHY 365 Physics Research Seminar	1		
PHY 400 Electricity and Magnetism	4			PHY 440 Quantum Mechanics	4		
Contemporary Western Life and thought (L) course	3			Comparative Systems (G) course	3		
				Electives	2		
	15				3		14
Fourth Year							
Fall	Credits	Interim	Credits	Spring	Credits		
PHY 490 Research	3	Interim Off	0	PHY 410 Thermodynamics	4		
MAT 344 (or elective)*2 Numerical Methods	3			PHY 432 & PHY 433 (or elective)*3 Topics in Contemporary Optics Topics in Contemporary Optics Lab	4		
Interpreting Biblical themes (J) course	3			Contemporary Christian Issues (P) course	3		
Electives	4			Leisure and Lifetime Sports (Q) course	1		
Cross Cultural Experience (Z) course	0-3			Artistic Experience (A) course	0-3		
	13-16				0		12-15
Total Credits 122-128							

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

2. Choose from MAT344 or PHY352/353

3. Choose from PHY332/333 or PHY432/433

This program assumes a student will use MAT124M and PHY292/292D to meet the general education Mathematics and Laboratory Science requirements.

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 Physics 2018-2019: 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			GES 244 Humanities III: European Enlightenment and American Culture to 1877	4
GES 145 Humanities I: Greco-Roman through Middle Ages	4			MAT 125 Calculus 2	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
PHY 302 & PHY 303 Electronics and Electronics Lab	4	World Cultures (U) course	3	PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4
MAT 223 Multivariable Calculus	3			PHY 352 & PHY 353 *2 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
COS 205 Scientific Computing	3			MAT 222 Differential Equations	3
GES 246 Humanities IV: Modern and Contemporary Western Culture	4			Second Language (S) course	4
	14		3		15
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
PHY 260 Careers in Engineering and Physics Seminar	1	Science, Technology and Society (K) course	3	PHY 332 & PHY 333 (or elective)*3	4
PHY 320 Mathematical Methods in Physics and Engineering	4			OpticsOptics Lab	4
PHY 400 Electricity and Magnetism	4			PHY 340 Mechanics	1
Comparative Systems (G) course	3			PHY 365 Physics Research Seminar	3
				Interpreting Biblical Themes (J) course	3
				Elective	3
	12		3		15
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
PHY 440 Quantum Mechanics	4	Interim Off		PHY 410 Thermodynamics	4
PHY 490 Research	3			PHY 432 & PHY 433 (or elective)*3 Topics in Contemporary OpticsTopics in Contemporary Optics Lab	4
Cross Cultural Experience (Z) course	0-3			Contemporary Christian Issues (P) course	3
Leisure and Lifetime Sports (Q) course	1			Artistic Experience (A) course	0-3
Elective	4			Elective	3
	12-15		0		14-17
Total Credits 122-128					

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

2. Choose from MAT344 or PHY352/353

3. Choose from PHY332/333 or PHY432/433

This program assumes a student will use MAT124M and PHY292/292D to meet the general education Mathematics and Laboratory Science requirements.

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.)