

## B.A. in Physics 2016-2017: Option 1 - CWILT

First Year						
	Fall	Credits	Interim	Credits	Spring	Credits
PHY292 & 292D General Physics I and General Physics Lab		4	Nature of Persons (N) course		3 PHY296 & PHY297 General Physics II and General Physics Lab II	4
MAT124M Calculus *1		4			MAT125 Calculus *2	4
<u>GES106 Introduction to Liberal Arts</u>		1			<u>GES130 Christianity Western Culture</u>	4
<u>GES110 College Writing</u>		3			<u>PEA100 Physical Wellness for Life</u>	1
<u>BIB101 Introduction to the Bible</u>		3				
		15		3		13
Second Year						
	Fall	Credits	Interim	Credits	Spring	Credits
PHY302 & PHY303 Electronics and Electronics Lab		4	Contemporary Western Life and Thought (L) course		3 PHY312 & PHY313 Modern Physics and Modern Physics Lab	4
<u>PHY260 Careers in Engineering and Physics Seminar</u>		1			<u>MAT222 Differential Equations</u>	3
<u>MAT223 Multivariable Calculus</u>		3			World Cultures (U) course	3
<u>GES125 Introduction to the Creative Arts</u>		4			Elective (PHY352/353 Computer Methods in Physics and Engineering strongly recommended)	4
Second Language (S) course *1		4				
		16		3		14
Third Year						
	Fall	Credits	Interim	Credits	Spring	Credits
PHY320 <u>Mathematical Methods in Physics and Engineering</u>		4	Science, Technology and Society (K) course		3 PHY 300- or 400- Elective *2	4
<u>THE201 Christian Theology</u>		3			Leisure and Lifetime Sports (Q) course	1
Comparative Systems (G) course		3			Elective (Physics course recommended)	4
Elective		3			Electives	6
		13		3		15
Fourth Year						
	Fall	Credits	Interim	Credits	Spring	Credits
PHY 300- or 400- Elective *2		4	Interim Off		PHY 300- or 400-level Elective *2	4
Interpreting Biblical Themes (J) course		3			Contemporary Christian Issues (P) course	3
Elective (Physics course recommended)		4			Elective (Science course recommended)	4
Elective		3			Elective	3
Cross Cultural Experience (Z) course		0-3			Artistic Experience (A) course	0-3
		14-17		0		14-17

Total Credits: 123-129

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

\*2 One course must be PHY332/333, PHY423/433 or PHY490

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.A. in Physics 2016-2017: Option 2 - Humanities

First Year						
Fall	Credits	Interim	Credits	Spring	Credits	
PHY292 & 292D General Physics I and General Physics Lab	4	<u>GES147 Humanities II: Renaissance and Reformation</u>	4	PHY296 & PHY297 General Physics II and General Physics Lab II	4	4
MAT124M Calculus *1	4			MAT125 Calculus *2	4	4
<u>GES106 Introduction to Liberal Arts</u>	1			<u>GES244 Humanities III: European Enlightenment and American Culture to 1877</u>	4	4
<u>GES145 Humanities I: Greco-Roman through Middle Ages</u>	4			<u>BIB101 Introduction to the Bible</u>	3	3
	13		4		15	
Second Year						
Fall	Credits	Interim	Credits	Spring	Credits	
PHY302 & PHY303 Electronics and Electronics Lab	4	Elective	3	PHY312 & PHY313 Modern Physics and Modern Physics Lab	4	4
<u>PHY260 Careers in Engineering and Physics Seminar</u>	1			<u>MAT222 Differential Equations</u>	3	3
<u>MAT223 Multivariable Calculus</u>	3			World Cultures (U) course	3	3
<u>GES246 Humanities IV: Modern and Contemporary Western Culture</u>	4			Elective (PHY352/353 computer Methods in Physics and Engineering strongly recommended)	4	4
Second Language (S) course *1	4					
	16		3		14	
Third Year						
Fall	Credits	Interim	Credits	Spring	Credits	
PHY320 Mathematical Methods in Physics and Engineering	4	Science, Technology and Society (K) course	3	PHY 300- or 400-level Elective *2	4	4
<u>PEA100 Physical Wellness for Life</u>	1			Leisure and Lifetime Sports (Q) course	1	1
Comparative Systems (G) course	3			Elective (Physics course recommended)	4	4
Nature of Persons (N) course	3			Elective	3	3
Electives	3					
	14		3		12	
Fourth Year						
Fall	Credits	Interim	Credits	Spring	Credits	
PHY 300- or 400-level elective *2	4	Interim Off		PHY 300- or 400-level elective	4	4
Interpreting Biblical Themes (J) course	3			Contemporary Christian Issues (P) course	3	3
Elective (Physics course recommended)	4			Elective (Science course recommended)	4	4
Elective	3			Elective	3	3
Cross Cultural Experience (Z) course	0-3			Artistic Experience (A) course	0-3	0-3
	14-17		0		14-17	
<b>Total Credits: 122-128</b>						

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

\*2 One course must be PHY332/333, PHY423/433 or PHY490

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.)