

## B.S. in Applied Physics (Mechanics Emphasis) 2023-2024: Option 1 - CWILT

FIRST YEAR					
Fall (odd)	Credits	January Session	Credits	Spring (even)	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	4
MAT 124M1 Calculus 1	4			GES 130 Christianity Western Culture	4
BIB 101 Introduction to the Bible	3			GES 140 Introduction to Wellbeing	2
GES 160 Inquiry Seminar	3			MAT 125 Calculus 2	4
	14		4		14
SECOND YEAR					
Fall (even)	Credits	January Session	Credits	Spring (odd)	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
COS 205 Scientific Computing	3			PHY 352 & PHY 353 Computer Methods in Physics and Engineering and Computer Methods in	4
MAT 223 Multivariable Calculus	3			MAT 222 Differential Equations	3
PHY 260 Careers in Engineering and Physics Seminar	1			Contemporary Western Life and Thought (L)	3
Second Language (S) course *1	4				3
	15		3		14
THIRD YEAR					
Fall (odd)	Credits	January Session	Credits	Spring (even)	Credits
PHY 320 Mathematical Methods in Physics and CHE 113 & CHE 113D General Chemistry I and General Chemistry I Lab	4	Science, Technology, and Society (K)	3	PHY 365 Physics Research Seminar	1
ENR 304 & ENR 305 Engineering Materials and Engineering Materials Lab	4			CHE 214 CHE 215 General Chemistry II and General Chemistry Elective	4
THE 201 Christian Theology	3			Comparative Systems (G) course Elective	3
	15		3		3
FOURTH YEAR					
Fall (even)	Credits	January Session	Credits	Spring (odd)	Credits
ENR 422 & ENR 423 Fluid Mechanics and Fluid Mechanics Lab	4			PHY 490 Research PHY 410 Thermodynamics	3
PHY 340 Mechanics	4			ENR 308 Statics and Mechanics of Materials	4
Contemporary Christian Issues (P) course	3			Interpreting Biblical themes (J) course	3
Elective	3			Artistic Experience (A) course	0-3
Cross-Cultural Experience (Z) course	0-3				
	14-17		0		14-17
<b>Total Credits 124-130</b>					<b>28</b>
					<b>124</b>

\*1. Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)

This program assumes a student will use [MAT 124M](#) and [PHY 292/PHY 292D](#) to meet the General Education Mathematics (M) course and Laboratory Science (D) course requirements.

Most financial aid packages stipulate 12 credits/term; Minnesota state grants are reduced when credit load falls below 15 credits/semester. January Session credits are counted as part of Spring Term.

## B.S. in Applied Physics (Mechanics Emphasis) 2023-2024: Option 2 - Humanities

FIRST YEAR					
Fall (odd)	Credits	January Session	Credits	Spring (even)	Credits
PHY 292 & PHY 292D	4	<a href="#">GES 147 Humanities II: Renaissance and Reformation</a>	4	PHY 296 & PHY 297	4
General Physics I and General Physics I Lab				General Physics II and General Physics II Lab	
<a href="#">MAT 124M1 Calculus 1</a>	4			<a href="#">GES 244 Humanities III: European Enlightenment and American Culture to 1877</a>	4
<a href="#">BIB 101 Introduction to the Bible</a>	3			<a href="#">GES 140 Introduction to Wellbeing</a>	2
<a href="#">GES 145 Humanities I: Greco-Roman through Middle</a>	4			<a href="#">MAT 125 Calculus 2</a>	4
	15		4		14
SECOND YEAR					
Fall (even)	Credits	January Session	Credits	Spring (odd)	Credits
PHY 302 & PHY 303	4	World Cultures (U) course	3	PHY 312 & PHY 313	4
Electronics and Electronics Lab				Modern Physics and Modern Physics Lab	
<a href="#">GES 246 Humanities IV: Modern and Contemporary Western Culture</a>	4			PHY 352 & PHY 353	4
<a href="#">COS 205 Scientific Computing</a>	3			Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	
<a href="#">MAT 223 Multivariable Calculus</a>	3			<a href="#">MAT 222 Differential Equations</a>	3
<a href="#">PHY 260 Careers in Engineering and Physics Seminar</a>	1			Second Language (S) course *1	4
	15		3		15
THIRD YEAR					
Fall (odd)	Credits	January Session	Credits	Spring (even)	Credits
PHY 320 Mathematical Methods in Physics and CHE 113 & CHE 113D	4	Science, Technology, and Society (K) course	3	PHY 365 Physics Research Seminar	1
General Chemistry I and General Chemistry I Lab				CHE 214	4
ENR 304 & ENR 305	4			CHE 215	
Engineering Materials and Engineering Materials Lab				General Chemistry II and General Chemistry II Lab	
	12		3	Elective	3
				Comparative Systems (G) course	3
				Elective	3
					14
FOURTH YEAR					
Fall (even)	Credits	January Session	Credits	Spring (odd)	Credits
ENR 422 & ENR 423	4			PHY 490 Research	3
Fluid Mechanics and Fluid Mechanics Lab				PHY 410 Thermodynamics	4
PHY 340 Mechanics	4			ENR 308 Statics and Mechanics of Materials	4
Contemporary Christian Issues (P) course	3			Interpreting Biblical themes (J) course	3
Elective	3			Artistic Experience (A) course	0-3
Cross-Cultural Experience (Z) course	0-3				
	14-17		0		14-17
<b>Total Credits 123-129</b>					28

\*1. Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)

This program assumes a student will use [MAT 124M](#) and [PHY 292/PHY 292D](#) to meet the General Education Mathematics (M) course and Laboratory Science (D) course requirements.

Most financial aid packages stipulate 12 credits/term; Minnesota state grants are reduced when credit load falls below 15 credits/semester. January Session credits are counted as part of Spring Term.