

B.S. in Applied Physics (Biomedical 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 *2	4	GES 125 Introduction to the Creative Arts	4	PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
GES 160 Inquiry Seminar	3			GES 130 Christianity Western Culture	4
MAT 124M Calculus 1	4			MAT 125 Calculus 2	4
BIB 101 Introduction to the Bible	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
COS 205 Scientific Computing	3			PHY 352 & PHY 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
MAT 223 Multivariable Calculus	3			THE 201 Christian Theology	3
PHY 260 Careers in Engineering and Physics Seminar	1			Second Language (S) course *1	4
Contemporary Western Life and Thought (L) course	3				
	14		3		15
THIRD YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
PHY 340 Mechanics	4	Science, Technology, and Society (K) course	3	BIO 120 & BIO 120D Introduction to Molecular and Cellular Biology and Introduction to Molecular and Cellular Biology Lab	4
PHY 422 & PHY 423 Fluid Mechanics and Fluid Mechanics Lab	4			BIO 216 & BIO 217 Human Physiology and Human Physiology Lab	4
PHY 424 & PHY 425 Electronic Materials and Devices and Electronic Materials and Devices Laboratory	4			PHY 365 Physics Research Seminar	1
Cross-Cultural Experience (Z) course	0-3			Comparative Systems (G) course	3
				Interpreting Biblical Themes (J) course	3
	*12 - 15		3		15
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
BIO 214 & BIO 215 Human Anatomy and Human Anatomy Lab	4	Interim Off		PHY 332 & PHY 333 Optics and Optics Lab	4
CHE 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab	4			Contemporary Christian Issues (P) course	3
PHY 320 Mathematical Methods in Physics and Engineering	4			Leisure and Lifetime Sport (Q) course	1
PHY 490 Research	3			Artistic Experience (A) course	0-3
				Electives	6
	15		0		14-17
Total Credits 124-130					

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

*2. Students may also use this course to complete a General Education requirement.

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 Applied Physics (Biomedical 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 *2	4	GES 147 Humanities II: Renaissance and Reformation	4	PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
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			GES 140 Introduction to Wellbeing	3
BIB 101 Introduction to the Bible	3			MAT 125 Calculus 2	4
	15		4		15
SECOND YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
COS 205 Scientific Computing	3	World Cultures (U) course	3	PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4
GES 246 Humanities IV: Modern and Contemporary Western Culture	4			PHY 352 & PHY 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
MAT 223 Multivariable Calculus	3			Second Language (S) course *1	4
PHY 302 & PHY 303 Electronics and Electronics Lab	4			THE 201 Christian Theology	3
	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	BIO 120 & BIO 120D Introduction to Molecular and Cellular Biology and Introduction to Molecular and Cellular Biology Lab	4
PHY 340 Mechanics	4			BIO 216 & BIO 217 Human Physiology and Human Physiology Lab	4
PHY 422 & PHY 423 Fluid Mechanics and Fluid Mechanics Lab	4			PHY 365 Physics Research Seminar	1
PHY 424 & PHY 425 Electronic Materials and Devices and Electronic Materials and Devices Laboratory	4			Comparative Systems (G) course	3
Cross-Cultural Experience (Z) course	0-3			Interpreting Biblical Themes (J) course	3
	13-16		3		15
FOURTH YEAR					
Fall	Credits	Interim	Credits	Spring	Credits
BIO 214 & BIO 215 Human Anatomy and Human Anatomy Lab	4	Interim Off		PHY 332 & PHY 333 Optics and Optics Lab	4
CHE 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab	4			Leisure and Lifetime Sports (Q) course	1
PHY 320 Mathematical Methods in Physics and Engineering	4			Elective	4
PHY 490 Research	3			Contemporary Christian Issues (P) course	3
				Artistic Experience (A) course	0-3
	15		0		*12-15
Total Credits 124-130					

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

*2. Students may also use this course to complete a General Education requirement.

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 u between fall and spring for state grant purposes only.)