

B.A. in Electrical Engineering 2017-2018: Option 1 - CWILT

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>PHY292 & 292D General Physics I and General Physics I Lab</u>	4	<u>GES160 Inquiry Seminar</u>	3	<u>PHY296 & PHY297 General Physics II and General Physics II Lab</u>	4
<u>MAT124M Calculus 1</u>	4			<u>MAT125 Calculus 2</u>	4
<u>GES140 Introduction to Wellbeing</u>	3			<u>GES130 Christianity Western Culture</u>	4
<u>GES125 Introduction to the Creative Arts</u>	4			<u>BIB101 Introduction to the Bible</u>	3
				Artistic Experience (A) course	0-3
	15		3		16
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>ENR260 Careers in Engineering and Physics Seminar</u>	1	<u>ENR160 Introduction to Engineering</u>	3	<u>MAT222 Differential Equations</u>	3
<u>MAT223 Multivariable Calculus</u>	3			<u>PHY312 & PHY313 Modern Physics and Modern Physics Lab</u>	4
<u>COS205 Scientific Computing</u>	3			Science, Technology, and Society (K) course	3
<u>PHY302 & PHY303 Electronics and Electronics Lab</u>	4			Second Language (S) course*	4
Contemporary Western Life and Thought (L) course	3			Cross-cultural Experience (Z) Course	0-3
	14		3		15
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>ENR320 Mathematical Methods in Physics and Engineering</u>	4	World Cultures (U) course		<u>PHY332 & PHY333 Optics and Optics Lab</u>	4
				<u>& PHY333 Optics and Optics Lab</u>	
<u>ENR316 & ENR317 Analog Circuitry and Design and Analog Circuitry Design Lab</u>	4			<u>ENR352 & ENR353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab</u>	4
<u>PHY400 Electricity and Magnetism</u>	4			<u>ENR306 & ENR307 Digital Logic and Design and Digital Logic and Design Lab</u>	4
<u>THE201 Christian Theology</u>	3			Interpreting Biblical Themes (J) Course	3
	15		3		15
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>ENR326 & ENR327 Circuit Analysis Simulations and Circuit Analysis Simulations Lab</u>	4	Interim Off		<u>ENR446 & ENR447 Control Systems and Control Systems Lab</u>	4
<u>ENR336 Signals and Systems</u>	4			<u>ENR436 & ENR437 Microprocessors and Microprocessors Lab</u>	4
<u>ENR424 & ENR425 Materials and Devices and Materials and Devices Lab</u>	4			<u>ENR490 Engineering Design Project</u>	3
<u>ENR465 Engineering Design Seminar</u>	1			Contemporary Christian Issues (P) Course	3
Comparative Systems (G) Course	3			Leisure and Lifetime Sport (Q) Course	1
	16		0		15
Total Credits: 130					

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

B.A. in Electrical Engineering 2017-2018: Option 2 - Humanities

First Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>PHY292 & 292D General Physics I and General Physics I Lab</u>	4	<u>GES147 Humanities II: Renaissance and Reformation</u>	4	<u>PHY296 & PHY297 General Physics II and General Physics II Lab</u>	4
<u>MAT124M Calculus 1</u>	4			<u>MAT125 Calculus 2</u>	4
<u>GES140 Introduction to Wellbeing</u>	3			<u>BIB101 Introduction to the Bible</u>	3
<u>GES145 Humanities I: Greco-Roman through Middle Ages</u>	4			<u>GES244 Humanities III: European Enlightenment and American Culture to 1877</u>	4
Leisure and Lifetime Sport (Q) course					
	16		4		15
Second Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>MAT223 Multivariable Calculus</u>	3	<u>ENR160 Introduction to Engineering</u>	3	<u>MAT222 Differential Equations</u>	3
<u>GES246 Humanities IV: Modern and Contemporary Western Culture</u>	4			<u>PHY312 & PHY313 Modern Physics and Modern Physics Lab</u>	4
<u>PHY302 & PHY303 Electronics and Electronics Lab</u>	4			<u>COS205 Scientific Computing</u>	3
<u>World Cultures (U) course</u>	3			Second Language (S) course*	4
				Cross-cultural Experience (Z) course	0-3
	14		3		15
Third Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>ENR320 Mathematical Methods in Physics and Engineering</u>	4	Comparative Systems (G) course	3	<u>PHY332 & PHY333 Optics and Optics Lab</u>	4
				<u>ENR352 & ENR353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab</u>	4
<u>PHY400 Electricity and Magnetism</u>	4			<u>ENR306 & ENR307 Digital Logic and Design and Digital Logic and Design Lab</u>	4
<u>ENR260 Careers in Engineering and Physics Seminar</u>	1			<u>Interpreting Biblical Themes (J) course</u>	3
<u>Science, Technology, and Society (K) course</u>	3				
	16		3		15
Fourth Year					
Fall	Credits	Interim	Credits	Spring	Credits
<u>ENR326 & ENR327 Circuit Analysis Simulations and Circuit Analysis Simulations Lab</u>	4	Interim Off	0	<u>ENR446 & ENR447 Control Systems and Control Systems Lab</u>	4
<u>ENR336 Signals and Systems</u>	4			<u>ENR436 & ENR437 Microprocessors and Microprocessors Lab</u>	4
<u>ENR424 & ENR425 Materials and Devices and Materials and Devices Lab</u>	4			<u>ENR490 Engineering Design Project</u>	3
<u>ENR465 Engineering Design Seminar</u>	1			Contemporary Christian Issues (P) course	3
				Artistic Experience (A) course	0-3
	13		0		15
Total Credits: 129					

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