B.S. in Mechanical Engineering 2019-2020: Option 1 - CWILT

FIRST YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
GES 130Christianity Western Culture	4	ENR 160Introduction to Engineering	3	GES 140Introduction to Wellbeing	3
GES 160 Inquiry Seminar	3			COS 205 Scientific Computing	3
MAT 124MCalculus 1	4			MAT 125 Calculus 2	4
PHY 292 & PHY 292D General Physics I and General Physics I Lab	4			PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
				Artistic Experience (A) course	0-3
	15		**3**		**14-17**
SECOND YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
BIB 101Introduction to the Bible	3	GES 125Introduction to the Creative Arts	4	ENR 304 & ENR 305 Engineering Materials and Engineering Materials Lab	4
CHE 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab	4			ENR 308 Statics and Mechanics of Materials	4
ENR 260 Careers in Engineering and Physics Seminar	1			PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4
MAT 223Multivariable Calculus	3			Contemporary Western Life and Thought (L) course	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			World Cultures (U) course	3
	15		**4**		**18**
THIRD YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 356Fundamentals of Design and Manufacturing	3	ENR 328Computer Aided Design and Engineering	3	ENR 318 & ENR 447 Engineering Thermal Science and Control Systems Lab	4
ENR 402Mechanical Systems and Measurements Lab	3			ENR 352 & ENR 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
MAT 224Differential Equations with Linear Algebra	4			ENR 358 & ENR 359 Design of Mechanical Components and Systems and Design of Mechanical Components and Systems Lab	4
PHY 340Mechanics	4			Cross-cultural Experience (Z) course	0-3
THE 201 Christian Theology	3			Leisure and Lifetime Sports (Q) course	1
	17		**3**		**13-16**
FOURTH YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 320Mathematical Methods in Physics and Engineering	4	Comparative Systems (G) course	3	ENR 446 & ENR 447 Control Systems and Control Systems Lab	4
ENR 422 & ENR 423 Fluid Mechanics and Fluid Mechanics Lab	4			ENR 348 Heat Transfer	3
ENR 465Engineering Design Seminar	1			ENR 490Engineering Design Project	3
Interpreting Biblical Themes (J) course	3			Science, Technology, and Society (K) course	3
Second Language (S) course[1]	4			Contemporary Christian Issues (P) course	3
	16		**3**		**16**
Total Credits 137-143					

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

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 Mechanical Engineering 2019-2020: Option 2 - Humanities

FIRST YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
BIB 101Introduction to the Bible	3	GES 147Humanities II: Renaissance and Reformation	4	COS 205 Scientific Computing	3
GES 145Humanities I: Greco-Roman through Middle Ages	4			GES 140Introduction to Wellbeing	3
MAT 124MCalculus 1	4			GES 244Humanities III: European Enlightenment and American Culture to 1877	4
PHY 292 & PHY 292D General Physics I and General Physics I Lab	4			MAT 125 Calculus 2	4
				PHY 296 & PHY 297 General Physics II and General Physics II Lab	4
	15		**4**		**18**
SECOND YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
CHE 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab	4	ENR 160Introduction to Engineering	3	ENR 304 & ENR 305 Engineering Materials and Engineering Materials Lab	4
ENR 260 Careers in Engineering and Physics Seminar	1			ENR 308 Statics and Mechanics of Materials	4
GES 246Humanities IV: Modern and Contemporary Western Culture	4			PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	4
MAT 223Multivariable Calculus	3			World Cultures (U) course	3
PHY 302 & PHY 303 Electronics and Electronics Lab	4			Leisure and Lifetime Sports (Q) course	1
	16		**3**		**16**
THIRD YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 356Fundamentals of Design and Manufacturing	3	ENR 328Computer Aided Design and Engineering	3	ENR 318Engineering Thermal Science	3
MAT 224Differential Equations with Linear Algebra	4			ENR 352 & ENR 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	4
PHY 340Mechanics	4			ENR 358 & ENR 359 Design of Mechanical Components and Systems and Design of Mechanical Components and Systems Lab	4
ENR 402Mechanical Systems and Measurements Lab	3			Interpreting Biblical Themes (J) course	3
				Science, Technology, and Society (K) course	3
	14		**3**		**17**
FOURTH YEAR					
Fall	**Credits**	**Interim**	**Credits**	**Spring**	**Credits**
ENR 320Mathematical Methods in Physics and Engineering	4	Comparative Systems (G) course	3	ENR 348 Heat Transfer	3
ENR 422 & ENR 423 Fluid Mechanics and Fluid Mechanics Lab	4			ENR 446 & ENR 447 Control Systems and Control Systems Lab	4
ENR 465Engineering Design Seminar	1			ENR 490Engineering Design Project	3
Second Language (S) course[1]	4			Artistic Experience (A) course	0-3
Cross-cultural Experience (Z) course	0-3			Contemporary Christian Issues (P) course	3
	13-16		**3**		**13-16**
Total Credits 135-141					

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

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.)