

B.A. in Engineering Enhanced Academic Plan

B.A. in Engineering - CWILT

Recommended Courses					Career Planning and Preparation	R.E.A.L. Experience
Fall Semester 1	Interim Semester 1	Spring Semester 1				
PHY 292 & PHY 292D General Physics I and General Physics I Lab MAT 124M Calculus 1 BIB 101 Introduction to the Bible GES 140 Introduction to Wellbeing	GES 125 Introduction to the Creative Arts	PHY 296 & PHY 297 General Physics II and General Physics II Lab MAT 125 Calculus 2 GES 130 Christianity Western Culture GES 160 Inquiry Seminar			PHASE 1: EXPLORE <i>Explore self, careers, & God's call</i> Take a Career Assessment Research Careers: O*Net, Candid Careers, & informational interviews w/ Alums Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering	Create your R.E.A.L. Portfolio Consider joining a club or ministry of interest Consider finding a mentor
14		4		15		

MILESTONES: Consider study abroad options

Recommended Courses					Career Planning and Preparation	R.E.A.L. Experience
Fall Semester 2	Interim Semester 2	Spring Semester 2				
COS 205 Scientific Computing MAT 223 Multivariable Calculus ENR 260 Careers in Engineering and Physics Seminar PHY 302 & PHY 303 *3 Electronics and Electronics Lab Second Language (S) course*1	THE 201 Christian Theology	MAT 222 Differential Equations PHY 312 & PHY 313 *3 Modern Physics and Modern Physics Lab ENR 352 & ENR 353m (or elective)*2 Computer Methods in Physics and Engineering Computer Methods in Physics and Engineering Lab Contemporary Western Life and Thought (L) course			PHASE 1&2: EXPLORE/EXPERIENCE <i>Finalize major if necessary & begin gaining experience</i> Create/update Resume & LinkedIn Build professional network (e.g. informational interviews) Attend Spring Career Fair Obtain Internship or relevant job by summer	Continue adding artifacts and reflections to your R.E.A.L. Portfolio. Consider taking a leadership position with a student club. Consider going on a spring break mission trip.
15		3		14		

MILESTONES: Consider doing an online course over the summer

Recommended Courses					Career Planning and Preparation	R.E.A.L. Experience
Fall Semester 3	Interim Semester 3	Spring Semester 3				
CHE 113 & CHE 113D General Chemistry I and General Chemistry I Lab ENR 320 *3 Mathematical Methods in Physics and Engineering World Cultures (U) course MAT 344 (or elective)*2 Numerical Methods Cross-Cultural Experience (Z) course Leisure and Lifetime Sports (Q) course	Comparative Systems (G) course	Science, Technology, and Society (K) course Contemporary Christian Issues (P) course Interpreting Biblical Themes (J) course Electives (Physics or Engineering course recommended) Artistic Experience (A) course			PHASE 2: EXPERIENCE <i>Use experiences to narrow down career choice & develop relevant skills</i> Participate in Fall & Spring Recruiting to obtain an internship Schedule a Mock Interview Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary Expand Professional Network	Review your R.E.A.L. Portfolio and prepare to make it public. Consider studying abroad. Consider applying for a Student Leadership Position in Student Life. Consider being a TA for a favorite class.
15-18		3		14-17		

MILESTONE: A minimum 3.2 GPA in your major is a good goal to strive for

Recommended Courses					Career Planning and Preparation	R.E.A.L. Experience
Fall Semester 4	Interim Semester 4	Spring Semester 4				
Credits from an accredited university engineering program					PHASE 3: EXECUTE <i>Execute an effective job or grad school search</i> Participate in Fall and Spring Recruiting Apply for Graduate School if necessary Expand Professional Network	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection. Consider mentoring an underclassman.
25						

Total Credits: 122-128

*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. Choose from ENR 352/ENR 353 or MAT 344.

3. Electives choices depend on area of engineering interest. At least 12 credits must be chosen from Electronics, Modern Physics, Mathematical Methods in Physics & Engineering, Mechanics, Fluid Mechanics, Topics in Applied Physics, Statistics, and Mechanics of Materials, Probability and Statistics. Chemical Engineers must choose General Chemistry II, Organic Chemistry I & II.

This program assumes a student will use PHY 292/PHY 292D and MAT 124M to meet the general education Laboratory Science and Mathematics requirements.

This is a dual-degree Engineering program. It must be completed at a university which offers engineering degrees.

Students receive their Bethel degree with an Engineering major only upon completion of the engineering degree at the other school.

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 Engineering Enhanced Academic Plan

B.A. in Engineering - Humanities

Recommended Courses				
Fall Semester 1	Interim Semester 1	Spring Semester 1	Career Planning and Preparation	R.E.A.L. Experience
PHY 292 & PHY 292D General Physics I and General Physics I Lab MAT 124M Calculus 1	GES 147 Humanities II: Renaissance and Reformation	PHY 296 & PHY 297 General Physics II and General Physics II Lab MAT 125 Calculus 2	PHASE 1: EXPLORE	Create your R.E.A.L. Portfolio
GES 145 Humanities I: Greco-Roman through Middle Ages		GES 244 Humanities III: European Enlightenment and American Culture to 1877	<i>Explore self, careers, & God's call</i>	Consider joining a club or ministry of interest
GES 140 Introduction to Wellbeing		Second Language (S) course*1	Take a Career Assessment Research Careers: O*Net, Candid Careers, & informational interviews w/ Alums Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering	Consider finding a mentor
15		4		15

MILESTONES: Consider study abroad options

Recommended Courses				
Fall Semester 2	Interim Semester 2	Spring Semester 2	Career Planning and Preparation	R.E.A.L. Experience
COS 205 Scientific Computing	World Cultures (U) course	MAT 222 Differential Equations	PHASE 1&2: EXPLORE/EXPERIENCE	Continue adding artifacts and reflections to your R.E.A.L. Portfolio.
MAT 223 Multivariable Calculus		PHY 312 & PHY 313 *3 Modern Physics and Modern Physics Lab	<i>Finalize major if necessary & begin gaining experience</i>	Consider taking a leadership position with a student club.
PHY 302 & PHY 303 *3 Electronics and Electronics Lab		ENR 352 & ENR 353 (or elective)*2 Computer Methods in Physics and Engineering Computer Methods in Physics and Engineering Lab	Create/update Resume & LinkedIn	Consider going on a spring break mission trip.
GES 246 Humanities IV: Modern and Contemporary Western Culture		BIB 101 Introduction to the Bible	Build professional network (e.g. informational interviews)	
ENR 260 Careers in Engineering and Physics Seminar			Attend Spring Career Fair	
15		3	Obtain Internship or relevant job by summer	14

MILESTONES: Consider doing an online course over the summer

Recommended Courses				
Fall Semester 3	Interim Semester 3	Spring Semester 3	Career Planning and Preparation	R.E.A.L. Experience
CHE 113 & CHE 113D General Chemistry I and General Chemistry I Lab	Comparative Systems (G) course	Science, Technology, and Society (K) course	PHASE 2: EXPERIENCE	Review your R.E.A.L. Portfolio and prepare to make it public.
ENR 320 *3 Mathematical Methods in Physics and Engineering		Contemporary Christian Issues (P) course	<i>Use experiences to narrow down career choice & develop relevant skills</i>	Consider studying abroad.
Lifetime and Leisure Sports (Q) course		Interpreting Biblical Themes (J) course	Participate in Fall & Spring Recruiting to obtain an internship	Consider applying for a Student Leadership Position in Student Life.
MAT 344 (or elective)*2 Numerical Methods		Electives (Physics or Engineering course recommended)	Schedule a Mock Interview	Consider being a TA for a favorite class.
Cross-Cultural Experience (Z) course		Artistic Experience (A) course	Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary	
Electives			Expand Professional Network	
15-18		3		12-15

MILESTONES: A minimum 3.2 GPA in your major is a good goal to strive for

Recommended Courses				
Fall Semester 4	Interim Semester 4	Spring Semester 4	Career Planning and Preparation	R.E.A.L. Experience
Credits from an accredited university engineering program			PHASE 3: EXECUTE	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection.
			<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
			Participate in Fall and Spring Recruiting	
			Apply for Graduate School if necessary	
25			Expand Professional Network	

Total Credits: 122-128

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