

B.S. in Computer Engineering Enhanced Academic Plan

B.S. in Computer Engineering - CWILT				
Recommended Courses				
Fall Semester 1	Interim Semester 1	Spring Semester 1	Career Planning and Preparation	R.E.A.L. Experience
MAT 124M Calculus 1 PHY 292 & PHY 292D General Physics I and General Physics I Lab GES 140 Introduction to Wellbeing	ENR 160 Introduction to Engineering	MAT 125 Calculus 2 COS 205 Scientific Computing	<u>PHASE 1: EXPLORE</u> <i>Explore self, careers, & God's call</i>	Create your R.E.A.L. Portfolio
GES 160 Inquiry Seminar		PHY 296 & PHY 297 General Physics II and General Physics II Lab GES 130 Christianity Western Culture	Take a Career Assessment	Consider joining a club or ministry of interest
			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
14		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
PHY 260 Careers in Engineering and Physics Seminar PHY 302 & PHY 303 Electronics and Electronics Lab COS 212 Computer Science 2	GES 125 Introduction to the Creative Arts	MAT 222 Differential Equations COS 214 Computer Architecture	<u>PHASE 1&2: EXPLORE/EXPERIENCE</u> <i>Finalize major if necessary & begin gaining experience</i>	Continue adding artifacts and reflections to your R.E.A.L. Portfolio. Consider taking a leadership position with a student club.
MAT 223 Multivariable Calculus MAT 241 Discrete Mathematics		COS 216 Data Structures and Algorithms PHY 352 Computer Methods in Physics and Engineering Contemporary Western Life and Thought (L) course	Create/update Resume & LinkedIn Build professional network (e.g. informational interviews) Attend Spring Career Fair	Consider going on a spring break mission trip.
			Obtain Internship or relevant job by summer	
15	4	16		
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
MAT 330 Probability and Statistics COS 301 Operating Systems BIB 101 Introduction to the Bible	Cross-cultural experience (Z) course	MAT 211 Linear Algebra COS 386 Data Communications and Computer Networks	<u>PHASE 2: EXPERIENCE</u> <i>Use experiences to narrow down career choice & develop relevant skills</i>	Review your R.E.A.L. Portfolio and prepare to make it public. Consider studying abroad.
ENR 336 (fall, even years) Signals and Systems		ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab THE 201 Christian Theology Comparative Systems (G) course	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	Consider applying for a Student Leadership Position in Student Life. Consider being a TA for a favorite class.
14	0-3	16		
MILESTONE: 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
ENR 316 & ENR 317 Analog Circuitry and Design and Analog Circuitry Design Lab ENR 436 & ENR 437 Microprocessors and Microprocessors Lab ENR 465 Engineering Design Seminar Interpreting Biblical Themes (J) course Leisure and Lifetime Sports (Q) course	COS 450 Humans and Computers	ENR 490 Engineering Design Project Second Language (S) course*1 Science, Technology, and Society (K) course Contemporary Christian Issues (P) course Artistic Experience (A) course (0-3 credits)	<u>PHASE 3: EXECUTE</u> <i>Execute an effective job or grad school search</i>	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection. Consider mentoring an underclassman.
			Participate in Fall and Spring Recruiting Apply for Graduate School if necessary Expand Professional Network	
13	3	14		
Total Credits: 127-130				
*1 Students must complete through the second semester of a first year language course or equivalent (Check the catalog for details of this option.)				
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 Computer Engineering Enhanced Academic Plan

B.S. in Computer Engineering - Humanities

Recommended Courses				
Fall Semester 1	Interim Semester 1	Spring Semester 1	Career Planning and Preparation	R.E.A.L. Experience
MAT 124M Calculus 1	GES 147 Humanities II: Renaissance and Reformation	MAT 125 Calculus 2	PHASE 1: EXPLORE	Create your R.E.A.L. Portfolio
GES 140 Introduction to Wellbeing		GES 244 Humanities III: European Enlightenment and American	<i>Explore self, careers, & God's call</i>	Consider joining a club or ministry of interest
GES 145 Humanities I: Greco-Roman through Middle Ages		PHY 296 & PHY 297 General Physics II and General Physics II Lab	Take a Career Assessment	Consider finding a mentor
PHY 292 & PHY 292D General Physics I and General Physics I Lab		COS 205 Scientific Computing	Research Careers: O*Net, Candid Careers, & informational interviews w/ Alums Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering	
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
MAT 223 Multivariable Calculus	ENR 160 Introduction to Engineering	PHY 352 Computer Methods in Physics and Engineering	PHASE 1&2: EXPLORE/EXPERIENCE	Continue adding artifacts and reflections to your R.E.A.L. Portfolio.
MAT 241 Discrete Mathematics		MAT 222 Differential Equations	<i>Finalize major if necessary & begin gaining experience</i>	Consider taking a leadership position with a student club.
PHY 302 & PHY 303 Electronics and Electronics Lab		COS 214 Computer Architecture	Create/update Resume & LinkedIn	Consider going on a spring break mission trip.
GES 246 Humanities IV: Modern and Contemporary Western Culture		Leisure and Lifetime Sports (Q) course	Build professional network (e.g. informational interviews)	
COS 212 Computer Science 2		COS 216 Data Structures and Algorithms	Attend Spring Career Fair	
18	3	14	Obtain Internship or relevant job by summer	

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
COS 301 Operating Systems	Cross-cultural experience (Z) course	MAT 211 Linear Algebra	PHASE 2: EXPERIENCE	Review your R.E.A.L. Portfolio and prepare to make it public.
ENR 336 Signals and Systems		COS 386 Data Communications and Computer Networks	<i>Use experiences to narrow down career choice & develop relevant skills</i>	Consider studying abroad.
MAT 330 Probability and Statistics		BIB 101 Introduction to the Bible	Participate in Fall & Spring Recruiting to obtain an internship	Consider applying for a Student Leadership Position in Student Life.
PHY 260 Careers in Engineering and Physics Seminar		ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	Schedule a Mock Interview Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary	Consider being a TA for a favorite class.
12	0-3	13	Expand Professional Network	

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
ENR 316 & ENR 317 Analog Circuitry and Design and Analog Circuitry Design Lab	COS 450 Humans and Computers	ENR 490 Engineering Design Project	PHASE 3: EXECUTE	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection.
ENR 436 & ENR 437 Microprocessors and Microprocessors Lab		Second Language (S) course*1	<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
ENR 465 Engineering Design Seminar		Science, Technology, and Society (K) course	Participate in Fall and Spring Recruiting	
Interpreting Biblical Themes (J) course		Contemporary Christian Issues (P) course	Apply for Graduate School if necessary	
12	3	14	Expand Professional Network	

Total Credits: 123-126

*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.)