

B.S. in Applied Physics (Electronics Emphasis) Enhanced Academic Plans

B.S. in Applied Physics (Electronics Emphasis) - CWILT				
Recommended Courses				
Fall Semester 1	Interim Semester 1	Spring Semester 1	Career Planning and Preparation	R.E.A.L. Experience
PHY 292 & PHY 292D 1 General Physics I and General Physics I Lab	GES 160 Inquiry Seminar	PHY 296 & PHY 297 General Physics II and General Physics II Lab	<b>PHASE 1: EXPLORE</b>	Create your R.E.A.L. Portfolio
GES 125 Introduction to the Creative Arts		GES 130 Christianity Western Culture	<i>Explore self, careers, &amp; God's call</i>	Consider joining Sigma Zeta, Women in Physics and Engineering (WPE), or another club or ministry of interest
MAT 124M Calculus 1		MAT 125 Calculus 2	Take a Career Assessment	
GES 140 Introduction to Wellbeing		BIB 101 Introduction to the Bible	Research Careers: O*Net, Candid Careers, & informational interviews w/ Alums	Consider finding a mentor
			Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering	
<b>15</b>	<b>3</b>	<b>15</b>		
<b>MILESTONES: Consider study abroad options</b>				
Recommended Courses				
Fall Semester 2	Interim Semester 2	Spring Semester 2	Career Planning and Preparation	R.E.A.L. Experience
PHY 302 & PHY 303 Electronics and Electronics Lab	World Cultures (U) course	MAT 222 Differential Equations	<b>PHASE 1&amp;2: EXPLORE/EXPERIENCE</b>	Continue adding artifacts and reflections to your R. E.A.L. Portfolio.
COS 205 Scientific Computing		PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	<i>Finalize major if necessary &amp; begin gaining experience</i>	Consider taking a leadership position with a student club.
MAT 223 Multivariable Calculus		Science, Technology, and Society (K) course	Create/update Resume & LinkedIn	Consider going on a spring break mission trip.
PHY 260 Careers in Engineering and Physics Seminar		Second Language (S) course	Build professional network (e.g. informational interviews)	
Contemporary Western Life and Thought (L) course		Cross-cultural Experience (Z) course	Attend Spring Career Fair	
			Obtain Internship or relevant job by summer	
<b>14</b>	<b>3</b>	<b>16</b>		
<b>MILESTONES: Consider doing an online course over the summer</b>				
Recommended Courses				
Fall Semester 3	Interim Semester 3	Spring Semester 3	Career Planning and Preparation	R.E.A.L. Experience
PHY 400 Electricity and Magnetism	Comparative Systems (G) course	PHY 340 Mechanics	<b>PHASE 2: EXPERIENCE</b>	Review your R.E.A.L. Portfolio and prepare to make it public.
CHE 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab		ENR 352 & ENR 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering	<i>Use experiences to narrow down career choice &amp; develop relevant skills</i>	Consider studying abroad.
THE 201 Christian Theology		ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	Participate in Fall & Spring Recruiting to obtain an internship	Consider applying for a Student Leadership Position in Student Life.
ENR 326 Circuit Analysis Simulations		PHY 365 Physics Research Seminar	Schedule a Mock Interview	Consider being a TA for a favorite class.
			Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary	
			Expand Professional Network	
<b>15</b>	<b>3</b>	<b>13</b>		
<b>MILESTONE: A minimum 3.2 GPA in your major is a good goal to strive for</b>				
Recommended Courses				
Fall Semester 4	Interim Semester 4	Spring Semester 4	Career Planning and Preparation	R.E.A.L. Experience
ENR 424 & ENR 425 Materials and Devices and Materials and Devices Lab	Interim Off	PHY 332 & PHY 333 Optics and Optics Lab	<b>PHASE 3: EXECUTE</b>	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection.
PHY 490 Research		Artistic Experience (A) course	<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
PHY 320 Mathematical Methods in Physics and Engineering		Contemporary Christian Issues (P) course	Participate in Fall and Spring Recruiting	
Interpreting Biblical Themes (J) course		Leisure and Lifetime Sport (Q) course	Apply for Graduate School if necessary	
		Elective	Expand Professional Network	
<b>14</b>	<b>0</b>	<b>14</b>		
<b>Total Credits: 125</b>				
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 falls below 15 credits/semester. (Interim may be split between fall and spring for the state grant purposes only.)				

B.S. in Applied Physics (Electronics Emphasis) Enhanced Academic Plans

B.S. in Applied Physics (Electronics Emphasis) - 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 1 General Physics I and General Physics I Lab	GES 147 Humanities II: Renaissance and Reformation	PHY 296 & PHY 297 General Physics II and General Physics II Lab	<u>PHASE 1: EXPLORE</u>	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, &amp; God's call</i>	Consider joining Sigma Zeta, Women in Physics and Engineering (WPE), or another club or ministry of interest
MAT 124M Calculus 1		BIB 101 Introduction to the Bible	Take a Career Assessment	
GES 140 Introduction to Wellbeing		MAT 125 Calculus 2	Research Careers: O*Net, Candid Careers, & informational interviews w/ Alums	Consider finding a mentor
			Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering	
<b>15</b>	<b>4</b>	<b>15</b>		
<b>MILESTONES: Consider study abroad options</b>				
Recommended Courses				
Fall Semester 2	Interim Semester 2	Spring Semester 2	Career Planning and Preparation	R.E.A.L. Experience
ENR 260 Careers in Engineering and Physics Seminar	World Cultures (U) course	MAT 222 Differential Equations	<u>PHASE 1&amp;2: EXPLORE/EXPERIENCE</u>	Continue adding artifacts and reflections to your R. E.A.L. Portfolio.
MAT 223 Multivariable Calculus		PHY 312 & PHY 313 Modern Physics and Modern Physics Lab	<i>Finalize major if necessary &amp; begin gaining experience</i>	Consider taking a leadership position with a student club.
GES 246 Humanities IV: Modern and Contemporary Western Culture		COS 205 Scientific Computing	Create/update Resume & LinkedIn	Consider going on a spring break mission trip.
PHY 302 & PHY 303 Electronics and Electronics Lab		Second Language (S) course	Build professional network (e.g. informational interviews)	
		Cross-cultural Experience (Z) course	Attend Spring Career Fair	
			Obtain Internship or relevant job by summer	
<b>12</b>	<b>3</b>	<b>15</b>		
<b>MILESTONES: Consider doing an online course over the summer</b>				
Recommended Courses				
Fall Semester 3	Interim Semester 3	Spring Semester 3	Career Planning and Preparation	R.E.A.L. Experience
PHY 400 Electricity and Magnetism	Comparative Systems (G) course	PHY 340 Mechanics	<u>PHASE 2: EXPERIENCE</u>	Review your R.E.A.L. Portfolio and prepare to make it public.
CHE 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab		ENR 352 & ENR 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	<i>Use experiences to narrow down career choice &amp; develop relevant skills</i>	Consider studying abroad.
ENR 326 Circuit Analysis Simulations		ENR 306 & ENR 307 Digital Logic and Design and Digital Logic and Design Lab	Participate in Fall & Spring Recruiting to obtain an internship	Consider applying for a Student Leadership Position in Student Life.
Science, Technology, and Society (K) course		PHY 365 Physics Research Seminar	Schedule a Mock Interview	Consider being a TA for a favorite class.
			Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary	
			Expand Professional Network	
<b>15</b>	<b>3</b>	<b>13</b>		
<b>MILESTONE: A minimum 3.2 GPA in your major is a good goal to strive for</b>				
Recommended Courses				
Fall Semester 4	Interim Semester 4	Spring Semester 4	Career Planning and Preparation	R.E.A.L. Experience
ENR 424 & ENR 425 Materials and Devices and Materials and Devices Lab	Interim Off	PHY 332 & PHY 333 Optics and Optics Lab	<u>PHASE 3: EXECUTE</u>	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection.
PHY 490 Research		Artistic Experience (A) course	<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
PHY 320 Mathematical Methods in Physics and Engineering		Contemporary Christian Issues (P) course	Participate in Fall and Spring Recruiting	
Interpreting Biblical Themes (J) course		Leisure and Lifetime Sport (Q) course	Apply for Graduate School if necessary	
		Elective	Expand Professional Network	
<b>14</b>	<b>0</b>	<b>13</b>		
<b>Total Credits: 122</b>				
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 falls below 15 credits/semester. (Interim may be split between fall and spring for the state grant purposes only.)				