

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

B.S. in Applied Physics (Mechanics 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 125 Introduction to the Creative Arts	PHY 296 & PHY 297 General Physics II and General Physics II Lab	<u>PHASE 1: EXPLORE</u>	Create your R.E.A.L. Portfolio
BIB 101 Introduction to the Bible		GES 130 Christianity Western Culture	<i>Explore self, careers, & God's call</i>	Consider joining Sigma Zeta, Women in Physics and Engineering (WPE), or another club or ministry of interest
GES 160 Inquiry Seminar		GES 140 Introduction to Wellbeing	Take a Career Assessment	
MAT 124M Calculus 1		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	
14	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
PHY 302 & PHY 303 Electronics and Electronics Lab	World Cultures (U) course	MAT 222 Differential Equations	<u>PHASE 1&2: EXPLORE/EXPERIENCE</u>	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 & begin gaining experience</i>	Consider taking a leadership position with a student club.
MAT 223 Multivariable Calculus		PHY 352 & PHY 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	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			Attend Spring Career Fair	
			Obtain Internship or relevant job by summer	
14	3	15		
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 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab	Science, Technology, and Society (K) course	ENR 308 Statics and Mechanics of Materials	<u>PHASE 2: EXPERIENCE</u>	Review your R.E.A.L. Portfolio and prepare to make it public.
PHY 422 & PHY 423 (fall, odd years) Fluid Mechanics, Fluid Mechanics Lab		PHY 340 Mechanics	<i>Use experiences to narrow down career choice & develop relevant skills</i>	Consider studying abroad.
PHY 320 Mathematical Methods in Physics and Engineering		PHY 365 Physics Research Seminar	Participate in Fall & Spring Recruiting to obtain an internship	Consider applying for a Student Leadership Position in Student Life.
THE 201 Christian Theology		Comparative Systems (G) course	Schedule a Mock Interview	Consider being a TA for a favorite class.
		Interpreting Biblical Themes (J) course	Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary	
			Expand Professional Network	
15	3	15		
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
PHY 424 & PHY 425 Materials and Devices and Materials and Devices Lab	Interim Off	PHY 410 (spring, odd years) Thermodynamics	<u>PHASE 3: EXECUTE</u>	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection.
PHY 490 Research		Leisure and Lifetime Sport (Q) course	<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
Contemporary Christian Issues (P) course		Artistic Experience (A) course	Participate in Fall and Spring Recruiting	
Cross-Cultural Experience (Z) course		Electives	Apply for Graduate School if necessary	
Electives			Expand Professional Network	
14-17	0	13-16		
Total Credits: 125-131				
1. Students may also use this course to complete a General Education requirement.				
2. 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 Applied Physics (Mechanics Emphasis) Enhanced Academic Plans

B.S. in Applied Physics (Mechanics Emphasis) - Humanities				
Recommended Courses			Career Planning and Preparation	R.E.A.L. Experience
Fall Semester 1	Interim Semester 1	Spring Semester 1		
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, & 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	
15	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	World Cultures (U) course	MAT 222 Differential Equations	<u>PHASE 1&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 & begin gaining experience</i>	Consider taking a leadership position with a student club.
GES 246 Humanities IV: Modern and Contemporary Western Culture		PHY 352 & PHY 353 Computer Methods in Physics and Engineering and Computer Methods in Physics and Engineering Lab	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)	
			Attend Spring Career Fair	
			Obtain Internship or relevant job by summer	
14	3	15		
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 208 & CHE 208D Accelerated General Chemistry and Accelerated General Chemistry Lab	Science, Technology, and Society (K) course	PHY 365 Physics Research Seminar	<u>PHASE 2: EXPERIENCE</u>	Review your R.E.A.L. Portfolio and prepare to make it public.
PHY 260 Careers in Engineering and Physics Seminar		ENR 308 Statics and Mechanics of Materials	<i>Use experiences to narrow down career choice & develop relevant skills</i>	Consider studying abroad.
PHY 320 Mathematical Methods in Physics and Engineering		PHY 340 Mechanics	Participate in Fall & Spring Recruiting to obtain an internship	Consider applying for a Student Leadership Position in Student Life.
PHY 422 & PHY 423 Fluid Mechanics and Fluid Mechanics Lab		Comparative Systems (G) course	Schedule a Mock Interview	Consider being a TA for a favorite class.
		Interpreting Biblical Themes (J) course	Explore Grad Schools & Take Entrance Exams (e.g. GRE) if necessary	
			Expand Professional Network	
13	3	15		
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		
PHY 424 & PHY 425 Materials and Devices and Materials and Devices Lab	Interim Off	PHY 410 Thermodynamics	<u>PHASE 3: EXECUTE</u>	Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection.
PHY 490 Research		Leisure and Lifetime Sport (Q) course	<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
Electives		Artistic Experience (A) course	Participate in Fall and Spring Recruiting	
Contemporary Christian Issues (P) course		Electives	Apply for Graduate School if necessary	
Cross-Cultural Experience (Z) course			Expand Professional Network	
14-17	0	13-16		
Total Credits: 124-130				
1. Students may also use this course to complete a General Education requirement.				
2. 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.)				