

B.A. in Mathematics and Data Science - CWILT

Recommended Courses				
Fall Semester 1	Interim Semester 1	Spring Semester 1	Career Planning and Preparation	R.E.A.L. Experience
COS 100 Introduction to Programming	GES 160 Inquiry Seminar	COS 105 Computer Science 1	<u>PHASE 1: EXPLORE</u>	Create your R.E.A.L. Portfolio
MAT 124M*1 Calculus 1		BIB 101 Introduction to the Bible	<i>Explore self, careers, & God's call</i>	Consider joining a club or ministry of interest
GES 140 Introduction to Wellbeing		GES 130 Christianity Western Culture	Take a Career Assessment	Consider finding a mentor
GES 125 Introduction to the Creative Arts		MAT 125 Calculus 2	Research Careers: O*Net, Candid Careers, & informational	
	14	3	15	Gain Experience: Part-time job; Campus Involvement (e.g.

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	Contemporary Western Life and Thought (L) course	MAT 211 Linear Algebra	<u>PHASE 1&2: EXPLORE/EXPERIENCE</u>	Continue adding artifacts and reflections to your R.E.A.L.
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.
COS 212 Computer Science 2		COS 216 Data Structures and Algorithms	Create/update Resume & LinkedIn	Consider going on a spring break mission trip.
Laboratory Science (D) course		THE 201 Christian Theology	Build professional network (e.g. informational interviews)	
	14	3	16	Attend Spring Career Fair
			16	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
MAT 330 Probability and Statistics	Interim Off	MAT 310 Algebraic Structures	<u>PHASE 2: EXPERIENCE</u>	Review your R.E.A.L. Portfolio and prepare to make it public.
COS 313 Database Systems		MAT 344 Numerical Methods	<i>Use experineces to narrow down career choice & develop</i>	Consider studying abroad.
Science, Technology, and Society (K) course		BUS 317 Business Analytics	Participate in Fall & Spring Recruiting to obtain an internship	Consider applying for research assistantships, teaching assistantships, or other Student Life.
World Cultures (U) course		Artistic Experience (A) course	Schedule a Mock Interview	Consider being a TA for a favorite class.
Cross-Cultural Experience (Z) course		Elective	Explore Grad Schools & Take Entrance Exams (e.g. GRE) if	
	12-15	0	14-17	Expand Professional Network

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
MAT 422 Real Analysis	MAT 499 Foundations of Mathematics	MAT 331 Applied Statistics	<u>PHASE 3: EXECUTE</u>	Continue updating your public R.E.A.L. Portfolio with
Interpreting Biblical Themes (J) course		Electives	<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
Comparative Systems (G) course		COS 334 Data Mining and Machine Learning	Participate in Fall and Spring Recruiting	
MAT 376 Operations Research		Contemporary Christian Issues (P) course	Apply for Graduate School if necessary	
	13	3	16	Expand Professional Network

Total Credits: 123-129

*1. Applied Math choices: choose two: MAT 344 Numerical methods (spring only), MAT 376 Operations Research (fall, odd years), or MAT 331 Applied Statistics (spring, even years).

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

This program assumes a student will use MAT 124M to meet the general education Mathematics requirements.

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 Mathematics and Data Science - Humanities

Recommended Courses				
Fall Semester 1	Interim Semester 1	Spring Semester 1	Career Planning and Preparation	R.E.A.L. Experience
COS 100 Introduction to Programming	GES 147 Humanities II: Renaissance and Reformation	BIB 101 Introduction to the Bible	PHASE 1: EXPLORE	Create your R.E.A.L. Portfolio
MAT 124M*1 Calculus 1		COS 105 Computer Science 1	<i>Explore self, careers, & God's call</i>	or another club or ministry of interest
GES 140 Introduction to Wellbeing		MAT 125 Calculus 2	Take a Career Assessment	Consider finding a mentor
GES 145 Humanities I: Greco-Roman through Middle Ages		GES 244 Humanities III: European Enlightenment and	Research Careers: O*Net, Candid Careers, & informational	
14	4	15	Gain Experience: Part-time job; Campus Involvement (e.g.	
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	Laboratory Science (D) course	MAT 211 Linear Algebra	PHASE 1&2: EXPLORE/EXPERIENCE	Continue adding artifacts and reflections to your R.E.A.L.
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.
COS 212 Computer Science 2		COS 216 Data Structures and Algorithms	Create/update Resume & LinkedIn	Consider going on a spring break mission trip.
GES 246 Humanities IV: Modern and Contemporary		Second Language (S) course*2	Build professional network (e.g. informational interviews)	
14	4	13	Attend Spring Career Fair	
			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
MAT 330 Probability and Statistics	Interim Off	MAT 310 Algebraic Structures	PHASE 2: EXPERIENCE	Review your R.E.A.L. Portfolio and prepare to make it public.
COS 313 Database Systems		MAT 344 Numerical Methods	<i>Use experiences to narrow down career choice & develop</i>	Consider studying abroad.
Science, Technology, and Society (K) course		Elective	Participate in Fall & Spring Recruiting to obtain an internship	Student Life.
World Cultures (U) course		BUS 317 Business Analytics	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	
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MILESTONE: A minimum 3.2 GPA in your major is a good goal to strive for				
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MAT 376 Operations Research	MAT 499 Foundations of Mathematics	MAT 331 Applied Statistics	PHASE 3: EXECUTE	Continue updating your public R.E.A.L. Portfolio with
MAT 422 Real Analysis		Electives	<i>Execute an effective job or grad school search</i>	Consider mentoring an underclassman.
Interpreting Biblical Themes (J) course		COS 334 Data Mining and Machine Learning	Participate in Fall and Spring Recruiting	
Comparative Systems (G) course		Contemporary Christian Issues (P) course	Apply for Graduate School if necessary	
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