B.A. in Mathematics with Education 5-12 Licensure 2018-2019: Option 1 - CWILT

| Recommended Courses |  |  |  | R.E.A.L. Experience |
| :---: | :---: | :---: | :---: | :---: |
| Fall Semester 1 | Interim Semester 1 | Spring Semester 1 | Career Planning and Preparation |  |
| MAT 124M Calculus 1 | GES 160 Inquiry Seminar | MAT 125 Calculus 2 | PHASE 1: EXPLORE | Create your R.E.A.L. Portfolio |
| GES 130 Christianity Western Culture |  | BIB 101 Introduction to the Bible | Explore self, careers, \& God's call | Consider joining a club or ministry of interest |
| COS 100 Introduction to Programming |  | GES 125 Introduction to the Creative Arts | Take a Career Assessment | Consider finding a mentor |
| GES 140 Introduction to Wellbeing |  | Laboratory Science (D) course | Research Careers: O*Net, Candid Careers, \& informational interviews w/ Alums |  |
|  |  |  | Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering |  |
| 14 | 3 | 15 |  |  |
| MILESTONES: Consider study abroad options |  |  |  |  |
| Recommended Courses |  |  |  |  |
| Fall Semester 2 | interim Semester 2 | Spring Semester 2 | Career Planning and Preparation | R.EA.L. Experience |
| MAT 223 Multivariable Calculus | EDU 2002 Introduction to Education | MAT 211 Linear Algebra | PHASE 1\&2: EXPLORE/EXPERIENCE | Continue adding artifacts and reflections to your R.E.A.L. <br> Portfolio. <br> Consider taking a leadership position with a student club. |
| MAT 241 Discrete Mathematics | EDU 201 Introduction to Education Field Experience | COS 105 Computer Science 1 | Finalize major if necessary \& begin gaining experience |  |
| THE 201 Christian Theology |  | EDU 203 School Health and Drugs | Create/update Resume \& Linkedln | Consider going on a spring break mission trip. |
| Second Language (S) course |  | World Cultures (U) course*3 | Build professional network (e.g. informational interviews) |  |
| Leisure and Lifetime Sports (Q) course |  | Contemporary Western Life and Thought (L) course | Attend Spring Career Fair |  |
| 14 | - 4 | 15 | 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 |
| Math choice: MAT344 (fall), MAT376 (fall, odd years), MAT331 (spring, even years) , Operations Research, Applied Statistics | Interpreting Biblical Themes (J) course | MAT 310 Algebraic Structures | PHASE 2: EXPERIENCE | Review your R.E.A.L. Portfolio and prepare to make it public. |
| MAT 330 Probability and Statistics |  | EDU 220 Introduction to Middle Level Education | Use experineces to narrow down career choice \& develop relevant skills | Consider studying abroad. |
| EDU 240 Educational Psychology |  | EDU 320 Pedagogy and the Young Adolescent Learner | Participate in Fall \& Spring Recruiting to obtain an internship | Consider applying for a Student Leadership Position in Student Life. |
| EDU 241 Educational Psychology Field Experience |  | EDU 321 Integrated Literacy in the Content Areas | Schedule a Mock Interview | Consider being a TA for a favorite class. |
| Artistic Experience (A) course |  | EDU 317 GZ Educational Equity | Explore Grad Schools \& Take Entrance Exams (e.g. GRE) if necessary |  |
| Science, Technology, and Society (K) course |  |  | Expand Professional Network |  |
| 13-17 | 3 | 12 |  |  |


| Recommended Courses |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall Semester 4 | Interim Semester 4 | Spring Semester 4 | Career Planning and Preparation |
| MAT 422 Real Analysis | MAT 499 Foundations of Mathematics | EDU 490 Student Teaching Block | PHASE 3: EXECUTE |
| EDU 411 Mathematics Education Practicum in grades 5-8 or 5-12 |  |  | Execute an effective job or grad school search |
| MAT 376 Operations Research |  |  | Participate in Fall and Spring Recruiting |
| EDU 412 Methods in Teaching 5-12 Mathematics |  |  | Apply for Graduate School if necessary |
| Contemporary Christian Issues (P) course |  |  | Expand Professional Network |
| 14 | 3 | 14 |  |

## R.E.A.L. Experience

Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection.
Consider mentoring an underclassman.

## Total Credits: 124-128

Students must competes through the second semester of a first year language course or equivalent. A student may not take LIN300 until the language sequence is complete. LIN300 is a fall-only course.
2. See education section in catalog for testing requirements.
3. The Education Department offers an interim trip that meets the U requirement - EDU 236UZ. See Education Abroad options.

This program assumes a student will use MAT 124M and EDU 317 GZ to meet the general education Mathematics and Comparative Systems requirements.
Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)

## B.A. in Mathematics with Education 5-12 Enhanced Academic Plan

## B.A. in Mathematics with Education 5-8 (2018-2019): Option 2 - Humanities

| Fall Semester 1 | Recommended Courses <br> 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. Porffolio |
| GES 145 Humanities I: Greco-Roman through Middle Ages |  | GES 244 Humanities III: European Enlightenment and American Culture to 1877 | Explore self, careers, \& God's call | Consider joining a club or ministry of interest |
| COS 100 Introduction to Programming |  | Leisure and Lifetime Sports ( $Q$ ) course | Take a Career Assessment | Consider finding a mentor |
| BIB 101 Introduction to the Bible |  | GES 140 Introduction to Wellbeing | Research Careers: O*Net, Candid Careers, \& informational interviews w/ Alums |  |
| 14 | 4 | 12 | Gain Experience: Part-time job; Campus Involvement (e.g. student club); Volunteering |  |
| MILESTONES: Consider study abroad options |  |  |  |  |
| Recommended Courses |  |  |  |  |
| Fall Semester 2 |  | MAT 211 Linear Algebra | eer Planning and Preparation R.E.A.L. Experience |  |
| MAT 223 Multivariable Calculus | EDU 2002 Introduction to Education | MAT 211 Linear Algebra | PHASE 182: EXPLOREIEXPERIENCE | Continue adding artifacts and reflections to your R.E.A.L. Portfolio. |
| MAT 241 Discrete Mathematics | EDU 201 Introduction to Education Field Experience | COS 105 Computer Science 1 | Finalize major if necessary \& begin gaining experience | Consider taking a leadership position with a student club. |
| GES 246 Humanities IV: Modern and Contemporary Western Culture |  | EDU 203 School Health and Drugs | Create/update Resume \& Linkedin | Consider going on a spring break mission trip. |
| Secondary Language (S) Course*1 |  | Laboratory Science (D) Course | Build professional network (e.g. informational interviews) |  |
|  |  |  | Attend Spring Career Fair |  |
|  | 4 | 13 | 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 | Interpreting Biblical Themes (J) course |  | PHASE 2: EXPERIENCE | Review your R.E.A.L. Portfolio and prepare to make it public. |
| MAT 351 (fall, even years) Modern Geometry |  | EDU 220 Introduction to Middle Level Education | Use experineces to narrow down career choice \& develop relevant skills | Consider studying abroad. |
| EDU 240 Educational Psychology |  | EDU 320 Pedagogy and the Young Adolescent Learner | Participate in Fall \& Spring Recruiting to obtain an internship | Consider applying for a Student Leadership Position in Student |
| EDU 241 Educational Psychology Field Experience |  | EDU 321 Integrated Literacy in the Content Areas | Schedule a Mock Interview | Consider being a TA for a favorite class. |
| World Cultures (U) course*3 |  | EDU 317 GZ Educational Equity | Explore Grad Schools \& Take Entrance Exams (e.g. GRE) if necessary necessary |  |
| Artistic Experience (A) course |  | Science, Technology, and Society (K) course |  |  |
| 13-16 | 3 | 15 | Expand Professional Network |  |
| MILESTONES: A minimum 3.2 GPA in your major is a good goal to strive for |  |  |  |  |
| Recommended Courses |  |  |  |  |
| Fall Semester 4 <br> Math choice: MAT344 (fall), MAT376 (fall, odd years), MAT331 | Interim Semester 4 | Spring Semester 4 | Career Planning and Preparation | R.E.A.L. Experience |
| Math choice: MAT344 (fall), MAT376 (fall, odd years), MAT331 (spring, even years), Operations Research, Applied Statistics MAT 422 Real Analysis | MAT 499 Foundations of Mathematics | EDU 490 Student Teaching Block | PHASE 3: EXECUTE | Continue updating your public R.E.A.L. Portfolio with relevant experiences and reflection. |
|  |  |  | Execute an effective job or grad school search |  |
| EDU 411 Mathematics Education Practicum in grades 5-8 or 512 |  |  | Participate in Fall and Spring Recruiting | Consider mentoring an underclassman. |
| EDU 412 Methods in Teaching 5-12 Mathematics |  |  | Apply for Graduate School if necessary |  |
| Contemporary Christian Issues (P) course |  |  |  |  |
|  | 3 | 14 |  |  |
| Total Credits: 122-125 through the second semester of a first year language course or equivalent. A student may not take LIN300 until the language sequence is complete. LINB00 is a fall-only course. |  |  |  |  |
|  |  |  |  |  |  |  |
| 2. See education section in catalog for testing requirements. |  |  |  |  |
| 3. The Education Department offers an interim trip that meets the U requirement - EDU 236 UZ . See Education Abroad options. |  |  |  |  |
| This program assumes a student will use MAT 124M and EDU 317 GZ to meet the general education Mathematios and Comparative Systems requirements. |  |  |  |  |
| Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.) |  |  |  |  |

