B.A. in Mathematics with Education 5-12 Licensure 2022-2023: Option 1 - CWILT

FIRST YEAR

Fall	Credits	Interim	Credits	Spring	Credits
COS 100 Introduction to Programming or COS 205 Scientific Computing	3	GES 160 Inquiry Seminar	3	BIB 101 Introduction to the Bible	3
GES 130 Christianity Western Culture	4			GES 125 Introduction to the Creative Arts	4
GES 140 Introduction to Wellbeing	3			MAT 125 Calculus 2	4
MAT 124M Calculus 1 *1	4			Laboratory Science (D) course	4
	14		3		15

SECOND YEAR

Fall	Credits	Interim	Credits	Spring	Credits
MAT 223 Multivariable Calculus	3	EDU 200 Introduction to Education *3	3	COS 105 Object-oriented Design and Programming	4
MAT 241 Discrete Mathematics	3	EDU 201 Introduction to Education Field Experience	1	EDU 203 School Health and Drugs	2
THE 201 Christian Theology	3			MAT 211 Linear Algebra	3
Second Language (S) course *2	4			Contemporary Western Life and Thought (L) course	3
Leisure and Lifetime Sports (Q) course	1			World Cultures (U) course *4	3
	14		4		15

THIRD YEAR

Fall	Credits	Interim	Credits	Spring	Credits
EDU 240 Educational Psychology	3	Interpreting Biblical Themes (J) course	3	EDU 220 Introduction to Middle Level Education	3
EDU 241 Educational Psychology Field Experience	1			EDU 317GZ Educational Equity	4
MAT 330 Probability and Statistics	3			EDU 320 Pedagogy and the Young Adolescent Learner	1
MAT 351 (fall, even # years) Modern Geometry	3			EDU 321 Integrated Literacy in the Content Areas	1
Science, Technology, and Society (K) course	3			MAT 310 Abstract Algebra	4
Artistic Experience (A) course	0-3				
	13-16		3		13

FOURTH YEAR

Fall	Credits	Interim	Credits	Spring	Credits
EDU 411 Mathematics Education Practicum in grades 5-8 or 5-12	1	MAT 499 Senior Seminar	3	EDU 490 Student Teaching Block	14
EDU 412 Methods in Teaching 5-12 Mathematics	3				
Applied Math course *5	3-4				
MAT 422 Real Analysis	3				
Contemporary Christian Issues (P) course	3				
	13-14		3		14

Total Credits 124-128

*1 This program assumes a student will use MAT 124M and EDU 317GZ to meet the General Education Mathematics (M) course and Comparative Systems (G) course requirements.

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

*3 See Education section in catalog for testing requirements.

*4 The Education Department offers an interim trip that meets the U requirement - EDU 236UZ. See Education Abroad options.

*5 Applied Math choices (choose one): MAT 300 Numerical Analysis (spring, odd years), MAT 309 Financial Math (fall, even years), MAT 376 Operations Research (fall, odd years), or MAT 331 Applied Statistics (spring, even years).

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 with Education 5-12 Licensure 2022-2023: Option 2 - Humanities

FIRST YEAR

Fall	Credits	Interim	Credits	Spring	Credits
COS 100 Introduction to Programming or COS 205 Scientific Computing	3	GES 147 Humanities II: Renaissance and Reformation	4	GES 140 Introduction to Wellbeing	3
BIB 101 Introduction to the Bible	3			GES 244 Humanities III: European Enlightenment and American Culture to 1877	4
GES 145 Humanities I: Greco-Roman through Middle Ages	4			MAT 125 Calculus 2	4
MAT 124M Calculus 1 *1	4			Leisure and Lifetime Sports (Q) course	1
	14		4		12

SECOND YEAR

Fall	Credits	Interim	Credits	Spring	Credits
GES 246 Humanities IV: Modern and Contemporary Western Culture	4	EDU 200 Introduction to Education *3	3	COS 105 Object-oriented Design and Programming	4
MAT 223 Multivariable Calculus	3	EDU 201 Introduction to Education Field Experience	1	EDU 203 School Health and Drugs	2
MAT 241 Discrete Mathematics	3			MAT 211 Linear Algebra	3
Second Language (S) course *2	4			Laboratory Science (D) Course	4
	14		4		13

THIRD YEAR

Fall	Credits	Interim	Credits	Spring	Credits
EDU 240 Educational Psychology	3	Interpreting Biblical Themes (J) course	3	EDU 220 Introduction to Middle Level Education	3
EDU 241 Educational Psychology Field Experience	1			EDU 317GZ Educational Equity	4
MAT 330 Probability and Statistics	3			EDU 320 Pedagogy and the Young Adolescent Learner	1
MAT 351 (fall, even # years) Modern Geometry	3			EDU 321 Integrated Literacy in the Content Areas	1
Artistic Experience (A) course	0-3			MAT 310 Abstract Algebra	4
World Cultures (U) course *4	3			Science, Technology, and Society (K) course	3
	13-16		3		16

FOURTH YEAR

Fall	Credits	Interim	Credits	Spring	Credits
EDU 411 Mathematics Education Practicum in grades 5-8 or 5-12	1	MAT 499 Senior Seminar	3	EDU 490 Student Teaching Block	14
EDU 412 Methods in Teaching 5-12 Mathematics	3				
Applied Math course *5	3-4				
MAT 422 Real Analysis	3				
Contemporary Christian Issues (P) course	3				
	13-14		3		14

Total Credits 123-127

*1 This program assumes a student will use MAT 124M and EDU 317GZ to meet the General Education Mathematics (M) course and Comparative Systems (G) course requirements.

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

*3 See Education section in catalog for testing requirements.

*4 The Education Department offers an interim trip that meets the U requirement - EDU 236UZ. See Education Abroad options.

*5 Applied Math choices (choose one): MAT 300 Numerical Analysis (spring, odd years), MAT 309 Financial Math (fall, even years), MAT 376 Operations Research (fall, odd years), or MAT 331 Applied Statistics (spring, even years).

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.)