MATHEMATICS EDUCATION CONCENTRATION

Mathematics, Bachelor of Arts with a Concentration in Mathematics Education Requirements

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS - 46 Hours Required		
Minimum of "C-"required		
Fundamental Academic Skills		**15**
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	ENGLISH COMPOSITION II	
Writing in the Discipline Course		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1100	DATA LITERACY AND VISUALIZATION	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
or STAT 1100	DATA LITERACY AND VISUALIZATION	
or STAT 1530	ELEMENTARY STATISTICS	
Distribution Requirements		**31**
Natural Science - From two disciplines and at least one lab - 7 hrs		
Social Science - From two disciplines - 9 hrs		
Humanities and Fine Arts - From two disciplines- 9 hrs		
Global Diversity - 3 hrs		
US Diversity - 3 hrs		
MAJOR REQUIREMENTS		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
Mathematics Major with a Concentration in Mathematics Education - 46 Hours Required		
This concentration is recommended for students interested in pursuing a career in Secondary Education. In some cases it is possible to simultaneously earn a B.S. or a B.A. in Math and a B.S. in Secondary Education.		
Required Coursework		**25**
MATH 1950	CALCULUS I (^)	
MATH 1960	CALCULUS II	
MATH 1970	CALCULUS III	
MATH 2050	APPLIED LINEAR ALGEBRA	
MATH 2230	INTRODUCTION TO ABSTRACT MATH	
MATH 2350	DIFFERENTIAL EQUATIONS	
MATH 3230	INTRODUCTION TO ANALYSIS	
Select one of the following		**3**
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I	
MATH 2200	MATHEMATICAL COMPUTING I (Recommended for Mathematics Education Concentration)	
MATH 3250	INTRODUCTION TO NUMERICAL METHODS	
Select all of the following Mathematics Education Concentration courses		**12**
MATH 3640	MODERN GEOMETRY	
MATH 3850	HISTORY OF MATHEMATICS	
MATH 4030	MODERN ALGEBRA	
MATH 4740	INTRODUCTION TO PROBABILITY AND STATISTICS I	
Select two of the following Mathematics Education Concentration courses		**6**
MATH 3100	APPLIED COMBINATORICS	
MATH 3200	MATHEMATICAL COMPUTING II	
MATH 4050	LINEAR ALGEBRA	
MATH 4560	NUMBER THEORY & CRYPTOGRAPHY	
MATH 4610	INTRODUCTION TO TOPOLOGY	
Select all of the following Educator Preparation Program Requirements		**27**
TED 2100	EDUCATIONAL FOUNDATIONS (** ^)	
TED 2200	HUMAN RELATIONS FOR BIAS-FREE CLASSROOMS (** ^)	
TED 2380	DEVELOPMENT AND LEARNING IN ADOLESCENCE	
TED 2400	PLANNING FOR EFFECTIVE TEACHING	
TED 3550	SECONDARY CLASSROOM MANAGEMENT (^)	
TED 3690	LITERACY AND LEARNING (^)	
TED 4000	SPECIAL METHODS IN THE CONTENT AREA (^)	
SPED 3800	DIFFERENTIATION AND INCLUSIVE PRACTICES (^)	
For those who want a Nebraska Math 6-12 Teaching Certificate		**12**
TED 4600	CLINICAL PRACTICE AND SEMINAR: ELEMENTARY OR SECONDARY LEVEL (Requires completion of all course work, have a minimum cumulative GPA of 2.75, passing Praxis Core scores (Math, Reading, and Writing), and be accepted into Clinical Practice)	
College Breadth		
College of Arts and Sciences' college breadth requirement satisfied by this major		
Bachelor of Arts Language Requirement		**16**
FREN, GERM, Or SPAN, 1110**, 1120, 2110, 2120		
ELECTIVES		
Elective hours as required to reach a total of 120 hours		

Mathematics, Bachelor of Arts with a Concentration in Mathematics Education Four Year Plan

Freshman

Fall		**Credits**
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
ENGL 1150	ENGLISH COMPOSITION I (*)	3
MATH 1950	CALCULUS I (**)	5
Foreign Language Course 1110***		5
*ENGL 1150: Requires placement via EPPE, AP, or ACT.		
**MATH 1950: Requires placement exam or ACT or SAT scores.		
***Level 1110 foreign language courses count as a Humanity/Fine Arts course, Global Diversity, and toward the student's BA requirement. If student is fulfilling the BA requirement via alternative methods, then 16 additional credits including a HFA and Global Diversity will need to be factored in to this degree plan.		
	Credits	**16**
Spring		
ENGL 1160	ENGLISH COMPOSITION II	3
MATH 1960	CALCULUS II	4
MATH 2050	APPLIED LINEAR ALGEBRA (*)	3
Foreign Language Course 1120		5
Recommended: Begin studying for Praxis CORE Academic Skills.		
*MATH 2050: Requires MATH 1950.		
	Credits	**15**
Summer		
MATH 1970	CALCULUS III	4
	Credits	**4**
Sophomore		
Fall		
MATH 2200	MATHEMATICAL COMPUTING I (*)	3
MATH 2230	INTRODUCTION TO ABSTRACT MATH (**)	3
TED 2100	EDUCATIONAL FOUNDATIONS (***)	3
TED 2200	HUMAN RELATIONS FOR BIAS-FREE CLASSROOMS (^)	3
Foreign Language Course 2110		3
*MATH 2200: Requires MATH 1950.		
**MATH 2230: Requires MATH 1960.		
***TED 2100: Requires 2.50 GPA. Fulfills Advanced Writing Requirement.		
^TED 2200: Requires 2.50 GPA.		
	Credits	**15**
Spring		
MATH 3200	MATHEMATICAL COMPUTING II (*)	3
MATH 3230	INTRODUCTION TO ANALYSIS (**)	3
MATH 4030	MODERN ALGEBRA (***)	3
Humanities and Fine Arts		3
Foreign Language Course 2120		3
*MATH 3200: Requires MATH 2200		
**MATH 3230: Reqiures MATH 2230		
***MATH 4030: Requires MATH 2030 or MATH 2230		
Required: Pass Praxis CORE Academic Skills by the end of this semester.		
Required: Acceptance into Educator Preparation Program. Must have 2.75 GPA.		
	Credits	**15**
Summer		
MATH 2350	DIFFERENTIAL EQUATIONS (*)	3
Humanities & Fine Arts Course + U.S. Diversity		3
*MATH 2350: Requires MATH 1960. MATH 2050 recommended but not required.		
	Credits	**6**
Junior		
Fall		
MATH 3640	MODERN GEOMETRY (*)	3
TED 2380	DEVELOPMENT AND LEARNING IN ADOLESCENCE (**)	3
TED 2400	PLANNING FOR EFFECTIVE TEACHING (**)	6
Social Science		3
*MATH 3640: Requires MATH 2230		
**TED 2400 and 2380 must be taken back-to-back, in either a Morning or Afternoon block.		
	Credits	**15**
Spring		
MATH 3100 or MATH 4560	APPLIED COMBINATORICS (*) or NUMBER THEORY & CRYPTOGRAPHY	3
MATH 3850	HISTORY OF MATHEMATICS (**)	3
TED 3550	SECONDARY CLASSROOM MANAGEMENT (***)	3
TED 3690	LITERACY AND LEARNING (***)	3
Social Science		3
*MATH 3100 or MATH 4560: Requires MATH 2230. MATH 4050 Linear Algebra can also satisfy this requirement. MATH 4050 requires MATH 2050 and MATH 2230.		
**MATH 3850: Requires MATH 2230.		
***TED 3550 and TED 3690 must be taken back-to-back, in either a Morning or Afternoon block.		
	Credits	**15**
Summer		
Natural/Physical Science Course, with lab*		4
Natural/Physical Science Course		3
*Natural/Physical Science Courses must be in 2 different disciplines		
	Credits	**7**
Senior		
Fall		
MATH 4740	INTRODUCTION TO PROBABILITY AND STATISTICS I (*)	3
SPED 3800	DIFFERENTIATION AND INCLUSIVE PRACTICES (**)	3
TED 4000	SPECIAL METHODS IN THE CONTENT AREA	3
Social Science***		3
*MATH 4740: Requires MATH 1970 and MATH 2230		
**SPED 3800: Must be taken concurrently with TED 4000 or TED 3550		
***Social Sciences course must be in a 2nd discipline		

Recommended but not required: Pass Praxis II.		
	Credits	**12**
Spring		
TED 4600	CLINICAL PRACTICE AND SEMINAR: ELEMENTARY OR SECONDARY LEVEL	12
	Credits	**12**
	Total Credits	**132**

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract and curriculum is subject to change

Additional Information About this Plan:
University Degree Requirements: The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. In order to graduate on-time (four years for an undergraduate degree), you need to take 30 hours each year.

Placement Exams: For Math, English, Foreign Language, a placement exam may be required. More information on these exams can be found at https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php

**Transfer credit or placement exam scores may change suggested plan of study

GPA Requirements: TED 2100 and TED 2200 require a 2.50 GPA. TED 2380 and TED 2400 as well as Admission into the Teacher Prep Program require a 2.75 GPA.

Graduation Requirements: 2.75 GPA.