

MATHEMATICS, BACHELOR OF SCIENCE

Mathematics, Bachelor of Science 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 - 46 Hours Required

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
MATH 3250	INTRODUCTION TO NUMERICAL METHODS

An additional 18 credits of approved 3000/4000 Level MATH/STAT courses, which must include at least 9 credits at the 4000 Level 18

College Breadth (choose one option) 15-30+

Option 1: Complete any UNO minor or undergraduate certificate - 15+ hours

Option 2: Additional General Education Requirements - 19+ hours

Additional quantitative literacy - 3 hours

Additional Social Science Gen. Ed. from 3rd Discipline - 3 hours

Additional Humanities Gen. Ed. from 3rd Discipline - 3 hours

HIST 1000 and HIST 1010 - 6 hours

Additional Nat. and Physical Science w/ Lab - 4-5 hours

Option 3: CAS comprehensive major (50+ hours) OR any second UNO major (30+ hours)

Bachelor of Science Cognate Requirement 15

The Bachelor of Science Degree requires at least 15 hours of related Cognate coursework that must be approved by the Mathematics Academic Advisor/Coordinator. Students can also choose a UNO Minor to satisfy their cognate requirement; however, this Cognate minor cannot double-count as the Option 1 minor for the College of Arts & Sciences College Breadth Requirement. A Computer Science Minor cannot satisfy the Cognate requirement for Mathematics. No more than 6 credits of cognate coursework may double-count within the general education requirements.

ELECTIVES

Elective hours as required to reach a total of 120 hours

Mathematics, Bachelor of Science Concentrations

- Applied and Computational Mathematics (<http://catalog.unomaha.edu/undergraduate/college-arts-sciences/mathematics/mathematics-bs/applied-computational-math-conc/>)
- Data Science (<http://catalog.unomaha.edu/undergraduate/college-arts-sciences/mathematics/mathematics-bs/data-science-conc/>)
- Mathematics Education (<http://catalog.unomaha.edu/undergraduate/college-arts-sciences/mathematics/mathematics-bs/math-ed-conc/>)
- Operations Research (<http://catalog.unomaha.edu/undergraduate/college-arts-sciences/mathematics/mathematics-bs/operations-research-conc/>)
- Pre-Actuarial Mathematics (<http://catalog.unomaha.edu/undergraduate/college-arts-sciences/mathematics/mathematics-bs/preactuarial-math-conc/>)
- Pure Mathematics (<http://catalog.unomaha.edu/undergraduate/college-arts-sciences/mathematics/mathematics-bs/pure-math-conc/>)
- Statistics (<http://catalog.unomaha.edu/undergraduate/college-arts-sciences/mathematics/mathematics-bs/statistics-conc/>)