MATHEMATICS

Academics

When you major in mathematics, you will study the areas of pure and applied mathematics, developing problem-solving abilities, versatility, and adaptability. In addition to the core requirements of a calculus series and linear algebra, you can match your interests by selecting one of seven options:

- *Standard*—coursework with the flexibility to combine math with almost any area or research interest
- *Discrete Mathematics and Cryptography*—coursework exploring algebra, coding theory, and cryptography
- *Education*—coursework for those interested in teaching high school math *(Note: We don't offer endorsement or certification to teach upon graduation.)*
- *Mathematical Biology*—coursework exploring areas of biology in a quantitative manner
- *Mathematical Finance*—coursework exploring the applications of math to insurance, banking, and finance
- *Mathematics of Physical Phenomena*—coursework exploring the applications of math to the physical world and engineering
- *Statistics and Data Science*—coursework exploring data and statistical analysis using coding

Experience

In the College of Arts and Sciences, we know experience is valuable and goes beyond the classroom. We strive to help you connect your academics with research, internships, education abroad, service learning and leadership experiences. Take advantage of opportunities in mathematics such as:

- Studying abroad in Budapest, Hungary or Bath, United Kingdom
- Serving as the Math Club president
- Interning with ConAgra Foods, Berkshire Hathaway Homestate or Allstate
- Researching with the National Security Agency (NSA)
- Volunteering with Math Motivators to tutor K–12 students

Opportunities

As a math major, your skills in logic and problem solving will be valuable in a variety of professions. In fact, the top 15 highest-earning college degrees have one thing in common—math skills. Here are examples of recent graduates' employment:

- Actuarial and Risk Analyst / *AMERITAS*
- Business Analyst / *SANDHILLS PUBLISHING*
- Data Engineer / *HUDL*
- Data and Research Engineer / *MERCER*
- Implementation Consultant / *FAST ENTERPRISES*
- Math Teacher / *OMAHA PUBLIC SCHOOLS*
- Programmer / Analyst / *CENTRIX SOLUTIONS, INC.*
- Quality Assurance Analyst / *NANONATION*
- Social Insurance Specialist / *SOCIAL SECURITY*
- Statistical Analyst / *EXPERIAN*
- Website Production Support / *CABELA'S*

Academic and Career Advising Center
107 Oldfather Hall | 402-472-4190 | casadvising@unl.edu
math.unl.edu | cas.unl.edu

MATH—SAMPLE 4-YEAR PLAN (STANDARD OPTION)*

ACE = Achievement-Centered Education   **CDR** = College Distribution Requirements

FIRST SEMESTER	
MATH 106: Calculus I (ACE 3)	5
Written Texts / Research & Knowledge Skills (ACE 1)	3
Social Sciences (ACE 6)	3
CDR: Language	5
Total Hours	**16**

SECOND SEMESTER	
MATH 107: Calculus II	4
CDR: Written Communication (ACE 1)	3
CDR: Language	5
Scientific Methods & Knowledge of Natural / Physical World (ACE 4)	3
Total Hours	**15**

THIRD SEMESTER	
MATH 208: Calculus III	4
CDR: Natural, Physical, and Mathematical Sciences with Lab	4
CDR: Language	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Total Hours	**14**

FOURTH SEMESTER	
MATH 310: Introduction to Modern Algebra	3
MATH 314: Linear Algebra	3
CDR: Human Diversity in U.S. Communities	3
CDR: Language	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Total Hours	**15**

FIFTH SEMESTER	
MATH 325: Elementary Analysis	3
MATH 221: Differential Equations *or* STAT 380: Statistics and Applications	3
Humanities (ACE 5)	3
Communication Skills (ACE 2)	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Total Hours	**15**

SIXTH SEMESTER	
Advanced Mathematics 300- or 400-Level Course	3
Advanced Mathematics 400-Level Course	3
Global Awareness & Human Diversity (ACE 9)	3
CDR: Humanities	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Total Hours	**15**

SEVENTH SEMESTER	
Advanced Mathematics 400-Level Course (ACE 10)	3
Ethics / Civics / Stewardship (ACE 8)	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Total Hours	**15**

EIGHTH SEMESTER	
Advanced Mathematics 300- or 400-Level Course	3
CDR: Social Science	3
Fine Arts (ACE 7)	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Total Hours	**15**

***DISCLAIMER:** This document represents a sample 4-year plan for degree completion with a major of interest in the College of Arts and Sciences.
Actual course selection and sequence may vary and should be discussed individually with an academic advisor at the college and department level.

UNIVERSITY *of* NEBRASKA–LINCOLN