



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 Student Leadership, Involvement, and Civic Engagement (SLICE) tax preparation

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**



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
Sciences (ACE 4)	3
Total Hours	15

THIRD SEMESTER

MATH 208: Calculus III	4
Communication Skills (ACE 2)	4
CDR: Natural, Physical, and Mathematical Sciences with Lab	4
CDR: Language	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
Advanced Mathematics Course	3
Humanities (ACE 5)	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Elective / Minor / Secondary Major / Pre-Professional / Science	3
Total Hours	15

SIXTH SEMESTER

Advanced Mathematics 300- or 400-Level Course	3
Advanced Mathematics 300- or 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.