

# B.A. Mathematics | Major Map

## 2022 GRADUATE CAREER OUTCOMES

Based on information from 100% of graduates

**100%** Secured Employment

**100%** Admitted Into Graduate School or Professional Program

## POPULAR CAREERS

- **Mathematics & Computational Science:** modeling & simulation, statistics & probability, engineering
- **Education:** teaching, applied & theoretical research
- **Computers:** programming, systems development, technical support, network administration
- **Insurance:** actuarial science, underwriting, loss management/control, risk management/assessment
- **Banking & Finance:** financial analysis, private banking, commercial lending, trust management, consumer credit analysis, cash management

## POPULAR EMPLOYERS

Universities, consulting firms, state government agencies, school districts, nonprofit organizations, computer services companies, insurance carriers, commercial banks, credit unions, chemical & pharmaceutical companies, brokerage firms, airlines & airports

## SIGNATURE EXPERIENCES

### • Example Research Topics

- Coronavirus Effect on the Workforce
- Machine Learning in Classification of Habitat Suitability Indices's
- National Science Foundation: Research Experience for Undergraduates (REU)
- Gamification of Nim on Graphs via the  $K_3$
- Math Modeling as an Educational Tool in Secondary Education
- Visualization of Graph Theoretic Applications Using
- Computer Programming

### • Internships

- Citi, financial analyst intern
- Sammons Financial, actuarial intern
- SAIC, data analyst intern
- Sioux Falls School District, student teacher
- Wells Fargo, underwriting intern

### • Study Away

- Browse the list of current offerings at [augie.edu/StudyAwayPortal](http://augie.edu/StudyAwayPortal), and contact the IPO to discover opportunities related to your vocational goals.



## WHY STUDY MATHEMATICS?

The advent of the information age has created a need for a mathematically literate workforce. The mathematics curriculum is designed to provide students with the necessary problem solving skills to be successful in this digital age. A major in mathematics suits students intending to become professionals in business or industry, preparing to become mathematics teachers or advancing to graduate studies.

## FIRST YEAR

## MIDDLE YEAR(S)

## LAST YEAR

### EXCEL ACADEMICALLY

- Review SOPHIA and program requirements with your academic advisor.
- Review your degree audit report, and create a plan of study in Academic Planner.
- Enroll in MATH 151 (fall), COSC 210 (J-Term) and MATH 152 (spring).
- Participate in FYS 112 to confirm your major, hear from upper-level students about signature experiences and chart a personalized plan for your engagement.
- Choose or confirm your major(s) or minor(s).

- Explore interdisciplinary minors or elective credits that interest you.
- Contact the Student Success Center to declare any second majors or minors.
- Participate in an applied-learning project in MATH 220, 310 and 327.
- Get ready for the Putnam Exam.
- Participate in MAA's American Mathematics Competitions and SIMIODE Modeling Challenges.
- Engage in summer undergraduate research projects

- Apply to graduate by Oct. 1, and review the degree audit provided by the Registrar's Office.
- Complete your capstone project in MATH 490: Senior Seminar.
- Education students take the Praxis exams.

### ENGAGE & APPLY YOUR LEARNING

- Access your Viking Central account. Participate in campus organizations such as the Augustana Student Association (ASA), Augustana University Education Association, Math Club and Pi Mu Epsilon, the national mathematics honor society.
- Explore study-away opportunities at the study-away fairs.
- Create an account in Augie Opportunities.

- Attend the Sophomore Retreat.
- Gain relevant summer employment.
- Participate in the alumni mentor program.
- Consider elite scholarship opportunities, such as the Fulbright, Rhodes or Truman.
- Earn the Diversity Advocate Certificate.
- Apply for Knight Internship Funds and ASA transportation funds. Pursue elite fellowships.

- During the summer, take standardized exams (e.g., GRE), and share your application to graduate or professional schools with your advisor and CAP specialist for feedback.
- Attend the BIG (Business, Industry & Government) and Teacher Job Fairs.
- Participate in mock interviews and networking events.
- Complete the career outcome survey to update us of your employment or enrollment in graduate school.
- Join the Augustana alumni community.

### CHART YOUR COURSE TODAY!

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