Mathematics, BA

# Mathematics, BA

Bachelor of Arts students majoring in mathematics enroll in one of three programs: Program A is for students who plan to work in business or government or pursue graduate study in mathematics: Program B is for students who seek secondary school teaching licensure; and Program C is for those seeking specialization in a math-related area, such as actuarial science, biochemistry, biomathematics, biostatistics, chemistry, computer science, data science, economics, engineering (all departments), finance, physics, risk management and insurance, statistics, and so forth. Program C may be especially appropriate for students who plan to seek a math-related job after earning a bachelor's degree, rather than going on to graduate study.

### **Learning Outcomes**

Math majors will be able to:

- give correct, logical mathematical proofs using mathematical terminology and hypotheses;
- reason logically and quantitatively using algebraic, analytic, and numerical methods;
- · incorporate mathematical ideas and reasoning into wellwritten English; and
- · model and analyze problems in pure mathematics and in other disciplines.

## **BA** with Second Major

Students majoring in mathematics may choose to earn a second major in computer science, statistics, actuarial science, or other disciplines. They must satisfy all requirements of Program A, Program B, or Program C in mathematics as well as all requirements for the second major. For more information, consult an advisor and see Policies Regarding Majors, Minors, and Certificates on the College of Liberal Arts and Sciences website.

#### Transfer from Engineering to **Mathematics**

Certain engineering students who have completed MATH:1550 Engineering Mathematics I: Single Variable Calculus, MATH:1560 Engineering Mathematics II: Multivariable Calculus, MATH:2550 Engineering Mathematics III: Matrix Algebra, MATH: 2560 Engineering Mathematics IV: Differential Equations, or MATH:3550 Engineering Mathematics V: Vector Calculus may count these courses toward the major in mathematics. See the Department of Mathematics website.