

MATHEMATICS *Liberal Arts*

COLLEGE OF ARTS + SCIENCES



YOU WILL USE math today. Everybody will. You'll use it when you check the time—or the speed limit. Newton, Galileo, da Vinci, Fibonacci: They used it in a variety of disciplines, and we still feel the echo of their work today—because math is where everything starts. That's where you come in. Whether you want to work in aeronautics, electronics, finance, marketing, opinion analysis, insurance, accounting, automation, sales, teaching, or something else—math is your first step. You have the aptitude, but you need the tools to build your strengths into a career. And that's where we come in. This unique liberal arts mathematics program offers the flexibility to explore another area of interest while still earning your mathematics degree.

Possible Careers:

- Statistician
- Investment Banker
- Accountant
- Auditor
- Professor

ATTENDING LOYOLA means being in the heart of New Orleans. Our campus is located in the city's historic Uptown neighborhood, just a short drive from the Central Business District, the city's hub of innovation, creativity, and strategic thinking. You'll learn to hone your talents in the city named #1 new brainpower city in America and #1 best city in the U.S. for creative professionals.

COURSES

In addition to our foundational mathematics core, you will also have the flexibility to choose electives tailored your interests. Here's a sample of what you can expect to learn and do:

Introduction to Linear Algebra

This course introduces topics in matrix algebra for applications that are basic to future coursework in mathematics. Topics include vector spaces, determinants, matrices, linear transformations, and eigenvectors.

Calculus I

This is a beginning course in the calculus of one variable and analytic geometry. The concept of limits and their use in differential and integral calculus, max and min values of functions, and solving for areas and volumes are treated.

Introduction to Differential Equations

This course examines the fundamental methods of solving elementary differential equations. Topics include exact solutions, series solutions, numerical solutions, and solutions using Laplace transforms.

Calculus II

Topics include the Mean Value Theorem and its applications, applications of the integral, transcendental functions, techniques of integration, sequences and series, and conic sections.

Topics in Geometry

The course includes foundations of geometry, congruences, parallelism, similarities, measures, coordinate systems, axiom systems for the Euclidean, and projective planes.