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 is the place.

New Orleans is the perfect place to study mathematics. Here, you’ll find opportunities to practically apply the skills you’ll learn at Loyola in a variety of our city’s expanding industries including business, government, education, tourism, and more. For instance, if your interest is in aerospace, Boeing is currently building the most powerful rocket of all time in New Orleans, and NASA’s Stennis Space Center is located only an hour from the city. However you want to use your math degree, New Orleans has a place for you.

Here at Loyola, we’ll give you hands-on experiences and opportunities to use what you learn in real ways. Network with your peers in our professional mathematics club, Pi Mu Epsilon. Spend a semester abroad and study mathematics in England, Turkey, or Korea. Study and conduct research in our multimedia resource labs using our computing software, reference materials, and tutoring services. Take an internship; conduct undergraduate research with faculty—at Loyola, we’re all about learning by doing.

Courses

In addition to our foundational mathematics core, you will also complete adjunct computation courses and choose electives tailored to the programs that interest you. Here’s a sample of what you can expect to learn and do:

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.

Linear Algebra
Linear algebra expands on topics introduced in Math A200 such as vector spaces, matrices, determinants, eigenvalues, linear functionals, bilinear forms, vector geometry, and their applications.

Math Probability
This course introduces the theory of probability. Topics include combinatorial analysis, axioms of probability, discrete and continuous random variables, expectation, multivariate probability distributions, function of random variables, and basic limit theorems.

Abstract Algebra I
This is a general survey course in the concepts of algebra treating number systems, groups, rings, domains, fields, matrices over a field, elements of Galois theory, and canonical forms.