In addition to our foundational mathematics core, you will also have the flexibility to choose electives tailored to 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.

**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.