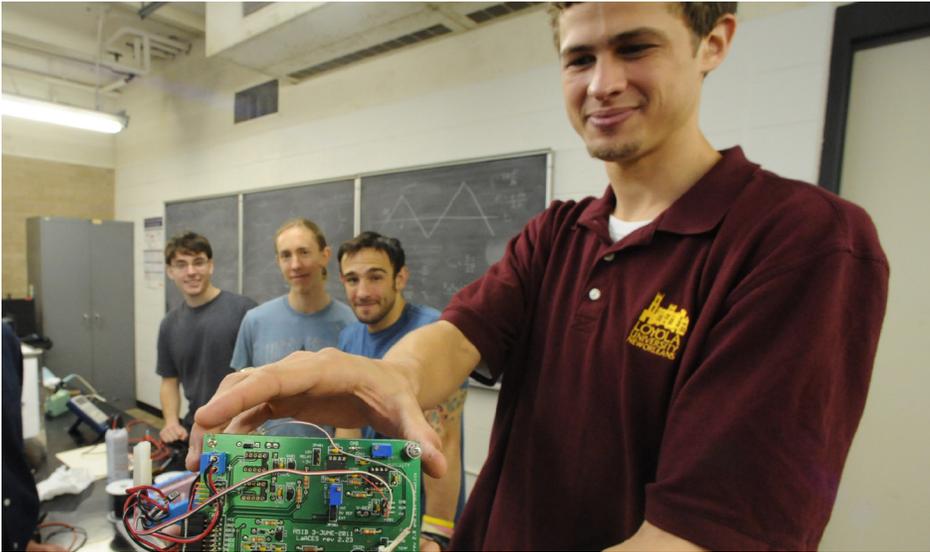


PHYSICS *Bachelor of Science*

COLLEGE OF ARTS + SCIENCES



COURSES

In addition to a structured foundational sequence of hard science courses, you'll take adjunct mathematics courses while moving into more advanced areas in physics. Here's a sample of what you can expect to learn and do:

Introduction to Electromagnetism and Relativity

This first-year course discusses electric and magnetic phenomena. It culminates in an elementary treatment of Maxwell's equations. The course also discusses Einstein's special theory of relativity and its consequences to near-speed-of-light travel.

Introduction to Waves and Quantum Physics

This sophomore course introduces students to the wonderfully weird world of quantum particles. After some preliminary treatment of wave phenomena, the course focuses on experimental foundations of quantum physics. Finally, it discusses the Schrödinger equation and the different interpretations of quantum mechanics.

Cosmology

This course combines observation results and theory to teach students about our universe (the space curvature, dark energy, dark matter etc.). It traces back the universe's history, from the earliest moments till the formation of large scale structures that we see in our night sky, the stars and galaxies.

Advanced Laboratory Physics

Students conduct experiments not ordinarily done at the elementary level. Experiments are performed in such areas as electronics, mechanics, atomic physics and spectroscopy.

EINSTEIN. NEWTON. HAWKING. BOHR. AND YOU. These are the people who dare to say that our world, full of strange phenomena and seemingly unpredictable processes, is explainable. Physicists investigate and articulate the laws that govern our universe—from the largest scales of the entire cosmos, to the smallest subatomic particles, and everything in between. Cellular biophysics, quantum optics, cosmology and gravitation, biomechanics, computer simulations, particle physics – are all areas of research pursued by our faculty, and areas where you could contribute too! The great geniuses of physics have pushed the understanding of our universe forward. At Loyno, we'll give you the tools you need to be part of that adventure.

Possible Careers:

- Professor of Physics or Astronomy
- Research scientist
- Meteorologist
- Geophysicist
- Nuclear physicist

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.