



## Physics

Physicists seek to understand phenomena ranging from the infinitesimal to the grand -- from how two "up" quarks and one "down" quark are held together to form a proton to how the Big Bang led to the distribution of galaxies observed in the universe. You might imagine a bewildering number of fundamental principles to explain the diversity in the phenomena displayed in the universe. The reality, however, is that it takes only a few.

Physics is challenging, but it is also rewarding. You will be urged to train your mind to look at the world in a different way, and to become a master at applying logic and advanced mathematics to real-world challenges.

An undergraduate degree in physics leads to careers in research and development, manufacturing and teaching. As a liberal arts degree, it is also excellent training for careers in medicine, business, finance and government. Students interested in pursuing graduate level studies find themselves well-prepared for a variety of graduate programs including physics, engineering and medical school.

---

### A Distinctive Program

At Stetson University, the physics department tailors your course of study to fit your needs and goals. Class sizes are small and faculty members provide personalized help. We offer a supportive learning environment, and we are very successful at placing our students into highly competitive, nationally-funded summer internships as well as top-tier graduate programs in physics and engineering. Graduates who enter the work force immediately after graduation are also successful at launching careers.

Students have access to department facilities for extended hours, including the labs, the computer lab and the science reading room. Students are often involved in faculty research, an opportunity not generally afforded undergraduates at major universities. You will learn from hands-on experience in state-of-the-art research facilities. There are a multitude of opportunities for research on campus and off campus at such locations as Argonne National Lab, University of Central Florida, Auburn and Vanderbilt.

---

### Academics and Research

#### Independent Research

During their senior year, students work on a senior project, possibly doing professional-level research with a faculty mentor. The entire cycle of a professional research project is followed, beginning with the project proposal process and culminating in research presentation opportunities including the Stetson Showcase, an annual research and creative arts symposium. The possibility of publication of your work is also an option. Recent student research projects range from examining the vastness of the universe to the minuteness of atoms as viewed through our scanning tunneling microscope, and from the physics of musical instruments and baseball bats to the surface structure of silicon crystals

#### Fast Facts

**Number of faculty:** 4

**Available for:** Major, Minor

**Emphasis within the major:**

Standard Track: Prepares students for graduate study and career opportunities;  
Applied Physics Track: Prepares students to enter the job market after graduation

**Popular Second Majors**

Mathematics

Pre-Engineering

» [Program Website](#)

*This program invites and encourages students to participate in research being conducted by faculty.*

used in computers.

## Facilities and Opportunities

Our facilities feature teaching laboratories with computers at every lab station and the latest equipment. In 2002, Stetson University received a \$2.5 million federal appropriation, administered by the Fund for the Improvement of Post-Secondary Education. This money supports the purchase of new equipment, instrumentation and lab furniture in the natural sciences at the university.

Labs are maintained and updated through an endowment established by the Kresge Foundation, which allows substantial purchases and updates to be made on an annual basis. The department also houses research laboratories in which cutting-edge research is being done by our faculty. Students are invited and encouraged to participate in this research. Such opportunities are rare for undergraduates and frequently are not available at other, especially larger, institutions. Finally, the department has a fully equipped machine shop with a full-time machinist. This allows the faculty to modify existing equipment or create custom-made equipment as needed for the labs or for specific research projects.

## Preparation for Graduate Study

The physics department is very successful at placing students in top-tier graduate programs. Our graduates have gone on to advanced studies at a variety of prestigious schools, including Yale, Dartmouth, Cornell, Vanderbilt, University of Minnesota, University of Michigan, Clemson, University of Florida and Stanford University. About 80 percent of our majors choose to pursue advanced degrees, and about half of our graduates who pursue graduate study do so in engineering. Almost without exception, our graduates obtain full funding for their graduate study.

---

## Awards and Recognition

---

### Distinguished Faculty

The physics department at Stetson University is composed of four Ph.D.-level physicists whose specialties include solid state physics, thermophysics, acoustics, holography, atomic force microscopy, magnetic force microscopy and biological physics. Faculty include:

- [George S. Glander](#), Ph.D., University of Wisconsin-Madison; LEED (low energy electron diffraction), Kikuchi electron diffraction
- [Thomas Vogel](#), Ph.D., University Leipzig, Germany; computational physics
- [Holley Lynch](#), Ph.D., Vanderbilt University; biophysics
- [Kevin T. Riggs](#), Ph.D., University of Minnesota; magnetic properties of thin films, musical acoustics

### Grant-Funded Research

One of the ways Stetson University fosters excellence in undergraduate programs is through the Stetson Undergraduate Research Experience. Each year undergraduate scholars are selected in a university-wide competition for grants to work with a faculty mentor on a summer research project. Additionally, many of our students participate in Research Experience for Undergraduate programs funded by the National Science Foundation.

### Undergraduate Awards and Honors

Stetson University has an active chapter of the physics honor society, Sigma Pi Sigma. The department also gives two awards. The George L. Jenkins Prize in Physics is awarded annually to the top student enrolled in the introductory physics course. The Jack Gibson Endowed Physics Research Award is presented annually to the student who demonstrates excellence in the senior research sequence.

---

## More Information



Office of Admissions  
421 North Woodland Boulevard, Unit 8378  
DeLand, Florida 32723



386-822-7100 or 800-688-0101



admissions@stetson.edu



stetson.edu/admissions

---

## Beyond the Classroom

---

### Internships

We are very successful at placing our students into highly competitive, nationally-funded summer internships. Many of our students participate in programs funded by federal agencies such as the National Science Foundation and the Department of Energy. These pay a stipend and travel expenses for summer research internships at a variety of universities and national laboratories around the country. Our students intern at Los Alamos National Laboratory, University of Florida, High Altitude Observatory in Boulder, Colo., Laser Interferometer Gravity-wave Observatory/LIGO at the California Institute of Technology, Harbor Branch Oceanographic Institution, NASA and others.

---

### After Stetson

---

### Diverse Careers

Studying physics at Stetson University can open the door to an exciting future in any number of fields. Employers value a degree in physics because graduates learn to think analytically, and to solve problems and express themselves effectively. Many of our majors go on to graduate school in fields ranging from physics and engineering to medical school teaching. They study at Auburn University, University of Florida, University of North Carolina, Vanderbilt University, Wake Forest University, Yale University and others. Others choose to go directly into research in either industry or in academics.

Graduates are employed as faculty in universities, medical schools and high schools; by companies such as IBM, Honeywell and Martin Marietta; and by government agencies such as NASA, the Department of Defense and Oak Ridge National Laboratories. For some specific examples of what our alumni have done, see the department's [Featured Alum page](#).



---

### More Information



Office of Admissions  
421 North Woodland Boulevard, Unit 8378  
DeLand, Florida 32723



386-822-7100 or 800-688-0101



admissions@stetson.edu



stetson.edu/admissions