

Physics (Applied)

√ Major

√ Minor

Description of the major:

Physics is at the core of nature; it is the study of the fundamental forces that drive all observable phenomena. Physicists study systems on length scales from the very large, like the origins of the universe, to the very small, like the particles and interactions that make up the nucleus. The applied physics degree at Coastal Carolina University focuses on the application of this knowledge to particular problems. Students in the applied physics program can study dynamic processes in the ocean and atmosphere, the genesis of galaxies, what happens when stars collide, and molecular interactions important to environmental and energy issues.

The student experience:

- Three concentrations are available: engineering, environmental and general physics. All of these tracks have a common core of introductory study (General Physics I, II and III with a strong math core) followed by more advanced courses in physics, research and independent study, coupled with applied courses like electronics, physical oceanography and/or electronics and computer interfacing.
- Students can easily merge their interest in physics with another subject such as marine science, chemistry, computer science or mathematics through a minor or a double major.
- Physics is a good choice of major for students interested in the dual degree engineering program with Clemson University, particularly for students interested in mechanical or civil engineering.
- Students majoring in physics will receive a strong technical background with experience in using computers and in applying physical principles to specific research questions.

- Since research is an integral part of Coastal Carolina University's program, students work closely with faculty to carry out individually tailored research projects. Students working with University faculty have spent summers in research centers across the country, such as the Jet Propulsion Laboratory, traveled to meetings to present research, and participated in prestigious programs like the National Council on Undergraduate Research Posters on Capitol Hill in Washington, D.C.

Beyond the classroom:

Physicists are involved in all of the following areas/industries: patent law; informational technology; materials and instrumentation; teaching at all levels; environmental work; technology research and development; and technical writing for electronic media, magazines, textbooks, etc.

Areas of study:

The University catalog has the complete list of courses for the major. You can find the catalog online at catalog.coastal.edu.

Courses include:

PHYS 211/213/214	General Physics I, II and III
PHYS 302	Electricity and Magnetism
PHYS 303	Quantum Mechanics
PHYS 430	Fluid Mechanics
PHYS 434	Atmospheric Physics

For more information:

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