



**UNC GREENSBORO**

College of Arts  
and Sciences

[aas.uncg.edu](http://aas.uncg.edu)

## Major

*Physics (BA) (BS) (LIC)*

## Contact

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## Department of Physics & Astronomy

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# PHYSICS

*Physics and astronomy are recognized as the basis for study, research, and understanding in the natural sciences. The undergraduate major provides students with a broad and general background in all areas of physics. The BA can include teacher licensure while the BS requires additional lab and science courses. The department also offers an excellent two-year pre-engineering program that prepares participants to transfer into an engineering school for degree completion.*

## Degree Outcomes

- Provides a firm basis for a career in medicine, law, business, sales, engineering, Web development, computing, biophysics, environmental science, and physics.
- Through the pre-engineering program, students have entered engineering programs at schools including N.C. State University, University of North Carolina at Charlotte, and N.C. Agricultural & Technical State University.
- With teacher licensure, provides preparation as a middle or high school teacher.
- Graduates hold positions as applications software engineer at McDonnell Douglas, NASA branch chief, CEO of Landmark Communication Interests, vice president of Oscom Communications, telecommunications engineer at AlliedSignal, and operations director at Continental Airlines.
- Prepares for advanced degrees; typical graduate schools include Cornell University, Johns Hopkins University, University of California-Santa Barbara, New York University, Duke University, The University of North Carolina at Chapel Hill, N.C. State University, and UNCG's Joint School of Nanoscience and Nanoengineering.

## The Student Experience

- Small, discussion-oriented classes.
- Dedicated teaching faculty with research focuses on biophysics, astrophysics, nonlinear systems, and science education.
- Opportunities to work with faculty on research projects in the junior or senior year; recent projects have included theoretical models of human heartbeats, studies of variable stars in globular clusters, studies of nonlinear dynamics, and study of the sodium pump in kidney cells.

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# PHYSICS

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## **The Student Experience (continued)**

- Participation in clubs and organizations including the Sigma Pi Sigma Physics Honor Society and the Society for Physics Students, which makes frequent trips to research facilities such as the National Radio Astronomy Observatory in Greenbank, W.Va., and the Triangle Universities Nuclear Laboratory.
- The potential to earn a BS in physics in three years and move directly into a PhD program in nanoscience.

## **Accolades & Accomplishments**

- The Three College Observatory, administered by UNCG, boasts the largest optical telescope in North Carolina and one of the largest in the southeastern U.S.

## **Accreditations & Affiliations**

- American Institute of Physics
- American Association of Physics Teachers
- American Astronomical Society
- Biophysical Society