PHYSICS, BS

Physics is the most fundamental of the sciences, interested in the properties of matter, radiation, and energy in all forms. It provides the underlying framework for other physical sciences and engineering and for understanding physical processes in biological and environmental sciences. The major gives you:

- Intellectual satisfaction: physics satisfies our deep desire to understand how the universe works. Physics is interesting.
- Intellectual challenge: by striving for fundamental understanding, the physicist accepts the challenge to move past a merely descriptive approach of our world and probes deeply into how and why it works.
- Physics produces new technology: today's physics research will become tomorrow's technological advances.
- Technical expertise: physicists exploit forefront technologies in their pursuits.
- Flexibility: in a fast-paced and changing world, it is much more important to have a broad substantive education than to be trained in a specific skill. We teach people how to think, and how to apply and extend what they know to new types of problems.
- Physics is analytical and quantitative: people who can reason analytically and quantitatively are essential for the success of almost any pursuit.

The Physics major provides an overall view of both classical and modern physics with the flexibility to continue learning in fields that interest you. It helps you develop skills in analysis, problem-solving, and quantitative reasoning that will aid you in whatever careers you choose.

What you learn in this major will:

- prepare you for graduate studies for master's or doctoral degrees in experimental or theoretical physics;.
- prepare you for employment in industrial or governmental laboratories;
- provide a broad background for further work in other sciences, such as materials sciences, aerospace, astronomy, computer science, geophysics, meteorology, radiology, medicine, biophysics, engineering, and environmental studies;
- provide a science-oriented education—useful training for some areas of business administration, law, and other fields; and
- provide part of the preparation you need to teach physics. To teach physics in high school, you will also take education courses to become certified. You will need a doctoral degree to become a college or university professor.

Interested in the undergraduate physics program? Check out the Physics undergraduate page (https://www.physics.wisc.edu/academics/undergrads/).

RELATED PROGRAMS

L&S Bachelor of Science in Applied Mathematics, Engineering, and Physics (https://guide.wisc.edu/undergraduate/letters-science/mathematics/applied-mathematics-engineering-physics-bs-amep/) (BS AMEP) in the Guide

L&S Astronomy–Physics major (https://guide.wisc.edu/undergraduate/letters-science/astronomy/astronomy-physics-ba/) in the Guide

EDUCATION–PHYSICS

A student working toward the Bachelor of Science–Education degree may major or minor in physics. Interested students should contact the School of Education (https://guide.wisc.edu/undergraduate/education/).

MEDICAL PHYSICS

A suggested curriculum for students interested in graduate study in Medical Physics is available on the Department of Medical physics webpage (https://www.medphysics.wisc.edu/graduate-program/admissions/#requirements).