

MAJOR IN PHYSICS, APPLIED PHYSICS CONCENTRATION

The Applied Physics concentration combines fundamental course work in physics with a selection of courses in a related field. Eight fields are available:

- The **Electronics, Semiconductors, and Optics** field and the **Materials and Fluids** field are designed for students interested in rapidly changing technology or in areas that overlap the boundaries of traditional engineering disciplines.
- The **Computers** field provides a foundation for the application of modern computer technology to problems in physics, the development of new types of computers, and jobs in computer programming.
- The **Chemistry** field combines thorough knowledge of both chemistry and physics, which is useful in such interdisciplinary areas as materials science, surface science, and physical chemistry/chemical physics.
- The **Medical Physics** field and the **Biophysics** field prepare students for further study in medical physics (the application of physics technologies to medical practice), health physics (radiation safety and protection), or biophysics, and are also appropriate for students planning careers in traditional health professions.
- The **Geophysics** field prepares students for further study in geophysics and careers involving application of physical methods in geology.
- The **Data Science** field provides students with the tools to analyze large data sets using contemporary statistical methods.

With this concentration, it is also possible for students to design a custom field (in consultation with departmental advisors) to meet their specific needs.