

# BIOPHYSICS

This major provides a solid foundation in both the biological sciences and the fundamental concepts of classical and quantum physics through a variety of tools that include abstract thought, experimentation and observation, data analysis, and mathematical modeling. This foundation prepares students for further study in graduate and professional schools and for careers as scientists or engineers who will participate in the creation of the science and technology of the future.

## BACHELOR OF SCIENCE (BS) GENERAL OVERVIEW

Twelve lower-division courses:

- Three lower-division physics courses
- Freshman Colloquium: Physics Discovery Series
- General Biology — Organismal Biology and Evolution
- General Biology — Cell Biology and Physiology
- General Chemistry A and B
- Calculus I, II, and III
- Mathematics of Physics and Engineering I or Linear Algebra and Differential Equations

Ten upper-division courses:

- Mechanics
- Thermodynamics and Statistical Physics
- Electricity and Magnetism
- Introduction to Quantum Mechanics and its Applications A
- Molecular Biology
- Biochemistry
- Organic Chemistry A & B
- Mathematics of Physics and Engineering II
- Physical Biology: From Molecules to Cells

## ACADEMIC OPPORTUNITIES

**Society of Physics Students:** SPS is a close-knit community of those interested in physics. Past meetings have covered an array of topics including lectures given by USC's 1994 Nobel Prize Winner, Dr. George Olah, discussions about NASA's Jet Propulsion Laboratory, and information on graduate school admissions.

**Freshman Science Honors Program:** FSH allows exceptional freshmen to study in an enriched first-year biology and chemistry sequence, featuring smaller classes and access to lectures, tours, and field trips.

**Supplemental Instruction:** This academic support program provides regularly scheduled, peer-led study sessions for common Biology, Chemistry, Math, and Physics courses.