

PHYSICS

This major provides a solid foundation in the fundamental concepts of classical and quantum physics through a variety of tools that include abstract thought, experimentation & observation, data analysis, and mathematical modeling. The foundation provided 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 ARTS (BA) GENERAL OVERVIEW

Ten lower-division courses:

- Fundamentals of Physics I, II, and III
- Freshman Colloquium: Physics Discovery Series
- General Chemistry A & B
- Calculus I, II, and III
- Mathematics of Physics and Engineering I

A Bachelor of Arts degree requires one course out of the following; a Bachelor of Science degree requires all four:

- Electricity and Magnetism B
- Introduction to Quantum Mechanics and its Applications B
- Introduction to Condensed Matter Physics
- Advanced Experimental Techniques

Six upper-division courses:

- Mechanics
- Introduction to Thermodynamics and Statistical Physics
- Electricity and Magnetism A
- Introduction to Quantum Mechanics and its Applications A
- Mathematics of Physics and Engineering II
- Senior Laboratory

ACADEMIC OPPORTUNITIES

Society of Physics Students: SPS seeks to create a tight-knit community of those interested in physics and astronomy and to provide opportunities for students to attend lectures and take field trips to sites including the NASA Jet Propulsion Laboratory.

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

Women in Physics at USC: WIP organizes a two-day conference for women in physics to promote an increased awareness of current research and career options in physics, greater familiarity with the graduate school experience, and resources for applying to and being successful in graduate school.