4-Point Plan for Freshmen
We Recommend
1. Take 4 years of Science (including Physics) and 4 years of Math in high school
2. Maintain highest GPA possible
3. Take SAT/ACT no later than December of application year
4. Apply on time (Deadline end Nov.)

Highly Recommended
1. Take pre-calculus or higher in high school
2. Attend CSULB Physics Open House with your teacher (usually in March and October)

Requirements for Transfer Students
1. Minimum cumulative GPA: 2.25
2. Required — Calculus I and II with grade of C or better
3. Recommended — Physics 151 and 152

Turn your passion for Science into a learning adventure and a career!

Our Mission: To train our students through coursework and research to become physicists who will excel in applying their skills and talents in science, technology, industry and education.

- Core courses involving a mix of lectures and laboratories that provide a strong foundation in Physics
- Active & early participation in exciting research projects with faculty
- For graduate students, Applied & Computational specializations
- Skills training for careers in industry, academia and teaching
Undergraduate Program:

We offer the following options for freshmen:
- Bachelor of Science (B.S.) - 120 units
- Bachelor of Arts (B.A.) - 120 units
- Physics Minor — minimum 20 units
- Preparation for Single-subject credential program

Lower Division Classes:
- PHYS 151: Mechanics & Heat
- PHYS 152: Electricity & Magnetism
- PHYS 254: Applied Modern Physics
- PHYS 255: Laboratory in Modern Physics (in addition to requisites in basic Chemistry, Math and Biology)

Upper Division Classes:
- PHYS 310: Analytic Mechanics
- PHYS 320: Thermodynamics
- PHYS 340A: Electricity & Magnetism I
- PHYS 340B: Electricity & Magnetism II
- PHYS 350: Modern Physics
- PHYS 360: Physics with Symbolic Algebra Software
- PHYS 380: Electronics
- PHYS 390: Exploring Physics Teaching
- PHYS 450: Quantum Physics I
- MATH364A: Ordinary Differential Equations

One advanced laboratory course and 8 units of elective upper division courses

Graduate Program: minimum 30 units

Our Masters in Physics degree (M.S) has been designed around advanced classes that provide a strong foundation for research-based learning. Financial assistance is available in the form of teaching assistantships. We offer a convenient schedule for working professionals.

Electives: Specialization in the following areas:
- Applied: Advanced experimental techniques
- Computational: Advanced numerical methods
- General: Relativity, Particle Physics

Core classes:
- PHYS 510: Graduate Mechanics
- PHYS 560A: Mathematical Methods of Physics
- PHYS 545/546: Experimental Physics I/II
- PHYS 540A: Electrodynamics
- PHYS 550A: Quantum Physics I
- PHYS 522: Statistical Physics
- PHYS 695: Colloquium

Thesis Research: Students typically work for 1-2 years with a faculty member to produce a research thesis, often resulting in a co-authored publication. Active areas of research in the department are:
- Condensed matter physics, Nano-optics,
- Few body quantum mechanics, Astrophysics,
- Particle physics among others.

Career Opportunities with a Physics Degree:

A Physics degree is highly valued across a range of professions for its emphasis on innovative thinking, problem solving and applied knowledge. It is also among the top 10 college majors that lead to high salaries. Our program offers the flexibility to focus on applied, theoretical or computational fields of Physics. Below are only a few examples of where a Physics degree can take you:

Industry: Aerospace, Computer Science, Meteorology, Industrial Health, Geophysics, Materials research, Lasers, Electro-Optics, Oceanography, Nuclear engineering

Graduate School (PhD): Doctoral degree, Research at National Labs, Professorships, University teaching and research, Technical writing & translation

Medical Physics: Radiation Dosimetry, Biophysics, Imaging, Patient and public safety, Clinical device management

Business: Econophysics, Wall street, Start-ups, Law

Teaching: High school, 2- and 4-year colleges

For more information, visit http://www.aps.org/careers/