Bachelor of Science in Physics | Degree Requirements

Required Math/Science Courses

PHYS 1010 Freshman Orientation I (1)	PHYS 3120 Classical Mechanics II (2)
PHYS 1020 Freshman Orientation II (1)	PHYS 3210 Electricity and Magnetism I (2)
PHYS 2010 Sophomore Orientation I (1)	PHYS 3220 Electricity and Magnetism II (2)
PHYS 2020 Sophomore Orientation II (1)	PHYS 3310 Thermal Physics (3)
PHYS 2070 Electrical Circuits (4)	PHYS 3500 Math Methods for Physical Sciences & Engineering (2)
PHYS 2210 Calculus-based Physics I (4)	PHYS 3510 Modern Physics (2)
PHYS 2220 Calculus-based Physics II (4)	PHYS 4010 Advanced Lab (2)
PHYS 2230 Calculus-based Physics III (4)	PHYS 4410 Quantum Mechanics I (2)
PHYS 3010 Intermediate Lab (3)	PHYS 4420 Quantum Mechanics II (2)
PHYS 3070 Circuit Theory and Electronics (3)	PHYS 4900 Senior Seminar (2)
PHYS 3110 Classical Mechanics I (2)	

Required Cognates

MATH 2310 or 2510 Calculus I (4)	MATH 2540 Ordinary Differential Equations (4)
MATH 2320 or 2520 Calculus II (4)	CHEM 1000 Foundations of Chemistry (3)
MATH 2530 Calculus III (4)	CHEM 1001 Introduction to Laboratory in Chemistry (2)

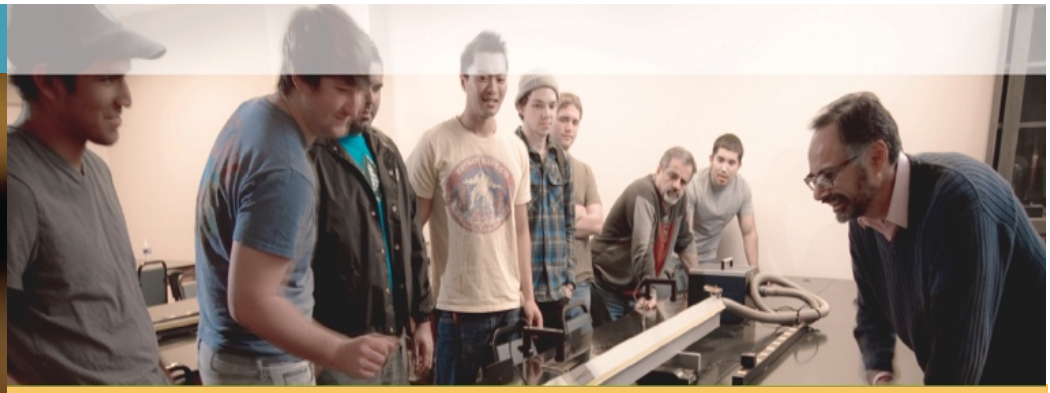
Elective Courses

(6 units or equivalent) Choose from: PHYS 3320, PHYS 3520, PHYS 4510, PHYS 4520, PHYS 4700, PHYS 4800; upper-division MATH, ECE, or ENGR with agreement from the academic advisor.

General Education

The General Education program was designed to increase the relevance and coherence of students' general education experience and to provide and reinforce the skills necessary for their success in their university studies, their careers, and their other life pursuits. Physics majors are required to take 42 units of general education courses.
See University Catalog for details.

PHYSICS & ENGINEERING



PHYSICS

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Bachelor of Science Degree in Physics

The Physics Degree at CSUB provides the foundation and underpinnings of everything in the physical world, and teaches you how to apply mathematics and computer technology to understand how the world functions. Physicists examine how nature works at its most fundamental levels, from the smallest scales of objects such as quarks and gluons, to the unimaginably huge scales of galaxies and the entire universe. At CSUB Physics students also learn to solve real-world problems. Students will utilize our state-of-the-art 5,000 square foot Physics and Engineering facilities and will be able to take elective courses from CSUB's Engineering programs.

Career Opportunities

Many CSUB Physics graduates go on to get doctoral degrees in Physics, aiming for research positions in academia, industry, or national laboratories. Others succeed in challenging and productive careers in a wide range of fields that include:

- Electrical Engineering
- Applied Physics
- Instrumentation & Electronics
- Materials Science
- Medical Physics
- Atmospheric Sciences
- Engineering
- Astronomy
- Medicine
- Biotechnology
- Education
- Consulting
- Finance
- Mathematical & Statistical Analysis
- Aerospace & Defense
- Environmental Consulting
- Energy & Conservation
- Law & Business
- Optics & Lasers
- Telecommunications