INTRODUCTORY REQUIREMENTS

Calculus: MATH 19A (FWS) ___ OR 20A (F) ___
MATH 19B (FWS) ___ OR 20B (W) ___

Vector Calculus: MATH 23A (FWS) ___ AND MATH 23B (FWS) ___

Chemistry: CHEM 1A (FWS) ___ OR 1B (FWS) ___

Physics: PHYS 5A/L (FW) ___ + 5B/M (W) ___ + SC/N (S) ___ + SD (F) ___

NOTE: To declare Applied Physics as a major, PHYS SABC must be completed with a GPA of 2.7 or higher

Computer Programming: CMPS 5C (*) ___ OR 5J (FWS) ___ OR 5P (WS)___ OR ASTR 119 (WS) ___ OR PHYS 115 (S) ___

*Students may also satisfy the computer programming requirement by demonstrating their knowledge of programming to a faculty member designated by the Physics department.

ADVANCED REQUIREMENTS 14 courses and a senior thesis

Modern Physics: PHYS 102 Modern Physics (FW) ___
Mechanics: PHYS 105 Mechanics (F) ___

Electricity/Magnetism/Optics: PHYS 110A Electricity, Magnetism, and Optics (W) ___
PHYS 110B Electricity, Magnetism, and Optics (S) ___

Thermodynamics: PHYS 112 Thermodynamics and Statistical Mechanics (W) ___

Math Methods: PHYS 116A Mathematical Methods in Physics (W) ___
PHYS 116B Mathematical Methods in Physics (S) ___
PHYS 116C Mathematical Methods in Physics (F) ___

Electives: THREE from the following...
AMS 107/PHYS 107 Introduction to Fluid Dynamics (F) ___
PHYS 115 Computational Physics (S) ___
PHYS 120 Polymer Physics (*) ___
PHYS 129 Nuclear and Particle Astrophysics (W) ___
PHYS 139A Quantum Mechanics (S) ___
PHYS 139B Quantum Mechanics (F) ___
PHYS 152 Optoelectronics (*) ___
PHYS 155 Solid State Physics (W) ___
PHYS 156 Applications of Solid State Physics (*) ___
PHYS 160 Practical Electronics (*) ___
PHYS 171 General Relativity, Black Holes and Cosmology (F) ___
PHYS 180 Biophysics (S) ___
EE 101/L Introduction to Electronic Circuits (FW) ___
EE 103 Signals and Systems (FS) ___
EE 115 Intro to Micro-Electro-Mechanical-Systems Design (S) ___
EE 130 Introduction to Optoelectronics and Photonics (F) ___
EE 145 Properties of Materials (F) ___
EE 154 Feedback Control Systems (F) ___
EE 171 Analog Electronics (S) ___
EE 172 Advanced Analog Circuits (F) ___
EE 178 Device Electronics (W) ___

NOTE: Other courses may be used to satisfy the elective requirement with approval from a faculty advisor

Intermediate Laboratory: PHYS 133 Intermediate Laboratory (FW) ___
Advanced Laboratory: PHYS 134 Physics Advanced Laboratory (WS) ___

DISCIPLINARY COMMUNICATION REQUIREMENT
Satisfied by successful completion of PHYS 182 and the senior thesis.
NOTE: This requirement MUST be completed at UCSC.

COMPREHENSIVE REQUIREMENT
PHYS 182 Scientific Communication for Physicists (FW) ___
Senior Thesis on an applied physics topic ___

Note: Courses appearing more than one category may fulfill only one requirement.