INTRODUCTORY REQUIREMENTS

Calculus:
MATH 11A (FWS) ___ + 11B (FWS) ___ + 22 (WS) ___  
OR MATH 19A (FWS) ___ + 19B (FWS) ___ + 22 (WS) ___  
OR AMS 15A (*) ___ + 15B (*) ___ + MATH 22 (WS) ___  

General Chemistry:
CHEM 1A (FWS) ___ + 1B/M (FWS) ___ + 1C/N (FWS) ___  

Organic Chemistry:
CHEM 108A/L (FW) ___ + 108B/M (WS) ___  

Physics:
PHYS 6A/L (FWS) ___ + 6B/M (WS) ___ + 6C/N (FS) ___  
OR PHYS 5A/L (F) ___ + 5B/M (W) ___ + 5C/N (S) ___  

ADVANCED REQUIREMENTS

Chemistry:
CHEM 151A/L Chemistry of Metals Lab (S) ___  
CHEM 163A Quantum Mechanics & Basic Spectroscopy (F) ___  
CHEM 163B Chemical Thermodynamics (W) ___  
CHEM 164 Physical Chemistry Lab (W) ___  

Electives: TWO from the following...  
CHEM 103 Biochemistry (FS) ___  
CHEM 109 Intermediate Organic Chemistry with Applications to Biology (S) ___  
CHEM 110/L Intermediate Organic Chemistry with Emphasis on Synthesis & Lab(S) ___  
CHEM 143 Organic Chemical Structure & Reactions (F) ___  
CHEM 151B Chemistry of the Main Group Elements (W) ___  
CHEM 156C Advanced Topics in Inorganic Chemistry (*) ___  
CHEM 163C Kinetic Theory & Reaction Kinetics, Statistical Mechanics, Spectroscopic Apps (S) ___  
CHEM 169 Chemistry & Biology of Drug Design & Development (S) ___  
BIOC 100A Biochemistry (F) ___  
BIOC 100B Biochemistry (W) ___  
BIOC 100C Biochemistry (S) ___  
METX 101 Sources & Fates of Pollutants (F) ___  
METX 102 Cell & Molecular Toxicology (*) ___  
OCEA 120 Aquatic Chemistry: Principles and Applications (*) ___  
OCEA 220 Chemical Oceanography (W) ___  
PHYS 116A Mathematical Methods in Physics (W) ___  
PHYS 116B Mathematical Methods in Physics (S) ___  
PHYS 180 Biophysics (S) ___  

Advanced Laboratory: ONE from the following...  
CHEM 146A Advanced Laboratory in Organic Chemistry (F) ___  
CHEM 146B Advanced Laboratory in Inorganic Chemistry Lab (S) ___  
CHEM 146C Advanced Laboratory in Physical Chemistry Lab (S) ___  

Note: Students conducting senior thesis research are required to choose an advanced lab outside of their area of research.

Disciplinary Communication: CHEM 151L and one of CHEM 146A, B, or C. The DC requirement MUST be taken at UCSC.

COMPREHENSIVE REQUIREMENT: Senior Thesis: CHEM 195A (IS) ___ + 195B (IS) ___ + 195C (IS) ___  
OR Senior Essay: CHEM 199 (IS) ___  
IS=Independent Study Form