INTRODUCTORY REQUIREMENTS

Calculus:
- MATH 11A (FWS) ___ + 11B (FWS) ___ + 22 (W) ___
- OR MATH 19A (FWS) ___ + 19B (FWS) ___ + 22 (W) ___

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

Biology:
- BIOL 20A (FWS) ___ + BIOE 20B (FWS) ___

Organic Chemistry:
- CHEM 108A/L (FW) ___ + 108B/M (WS) ___ + CHEM 110/L (S) ___

Earth & Planetary Sciences:
- EART 5/L (F) ___ OR EART 10/L (W) ___ OR EART 20/L (S) ___

Environmental Studies:
- ENVS 25 (W) ___

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 103 Biochemistry (W) ___
- CHEM 122 Principles of Instrumental Analysis (F) ___
- CHEM 151A/L Chemistry of Metals Lab (W) ___
- CHEM 163A Quantum Mechanics & Basic Spectroscopy (F) ___
- CHEM 163B Chemical Thermodynamics (W) ___
- CHEM 164 Physical Chemistry Lab (W) ___

Earth & Planetary Sciences:
- EART 110B/M Earth as a Chemical System (W) ___

Microbiology & Environ. Toxicology:
- choose ONE...
  - METX 101 Sources & Fates of pollutants (S) ___
  - METX 102 Cell & Molecular Toxicology (*) ___

Ocean Sciences:
- ONE of the following...
  - OCEA 120 Aquatic Chemistry: Principles and Applications (S) ___
  - OCEA 220 Chemical Oceanography (W) ___

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

Note: Students conducting senior thesis research are required to choose a 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 194 (IS) ___

IS = Independent Study Form

http://registrar.ucsc.edu/forms/students/undergraduate-special-study-course.pdf