Earth Science AB 130 Mix and Match

Domain	CPP courses needed to fulfill
215 Subtest 1 Foundational-Level General Science	
General Science Domain 1: Scientific Practices, Engineering Design and Applications, and Crosscutting Concepts (Subtest I)	Choose one of the following: _____ SCI 2000, 2990, 4000, or 4990 (student research, or department equivalent) _____SCI 4610 or department equivalent Senior Research _____SCI 4620 Senior Seminar
General Science Domain 2: Physical Sciences (Subtest I)	Complete all _____CHM 1210/L General Chemistry I & Lab _____CHM 1220/L General Chemistry II & Lab _____PHY 1210/L (or 1510/L) Physics of Motion, Fluids, and Heat & Lab _____PHY 1220L (or 1520/L) Physics of Electromagnetism, Circuits, and Light & Lab
General Science Domain 3: Life Sciences (Subtest I)	Complete all _____BIO 1210/L Foundations of Biology: Energy and Matter and Information & Lab _____BIO 1220/L Foundations of Biology: Evolution, Ecology, and Biodiversity & Lab
General Science Domain 4: Earth and Space Sciences (Subtest I)	Complete all _____GSC 1110/1410L Principles of Geology & Lab _____GSC 1160 Introduction to Astronomy _____GSC 3500 Natural Disasters
219 Earth Science specific domains (Subtest 2)	
Domain 1: Earth's Place in the Universe (Subtest II)	Complete all ____GSC 1160 Introduction to Astronomy ____GSC 1120/1510L Earth, Time and Life & Lab
Domain 2: Earth's Systems (Subtest II)	Complete all ____GSC 1110/1410L Principles of Geology & Lab ____GSC 1200 Introduction to Oceanography ____GSC 2550L Field Methods Laboratory ____GSC 3000/L Geochemistry & Lab

	____GSC 3040 Meteorology ____GSC 3200 Studies of a Blue Planet
Domain 3: Earth and Human Activity (Subtest II)	Complete all ____GSC 3500 Natural Disasters ____GSC 2150/L Mineralogy & Lab ____GSC 4010/L GIS Applications for Earth & Environmental Scientists & Lab ____GSC 3210/L Engineering Geology I & Lab ____GSC 3230/L Geomorphology & Lab ____GSC 3600/L Hydrogeology & Lab

More detail about the Domains

Science: Foundational Level Science

- **General Science Domain 1: Scientific Practices, Engineering Design and Applications, and Crosscutting Concepts (Subtest I)**
  - Understand scientific practices
  - Understand engineering practices, design, and applications
  - Understand crosscutting concepts among the sciences and engineering
- **General Science Domain 2: Physical Sciences (Subtest I)**
  - Understand structure and properties of matter
  - Understand chemical reactions and biochemistry
  - Understand motion and stability: forces and interactions
  - Understand waves and their applications in technologies for information transfer
  - Understand energy
  - Understand electricity and magnetism
- **General Science Domain 3: Life Sciences (Subtest I)**
  - Understand the structure and function of cells
  - Understand growth, development, and energy flow in organisms
  - Understand ecosystems: interactions, energy, and dynamics
  - Understand heredity: inheritance and variation of traits
  - Understand biological evolution: unity and diversity
- **General Science Domain 4: Earth and Space Sciences (Subtest I)**
  - Understand Earth's place in the universe
  - Understand Earth's materials and systems and surface processes

- Understand plate tectonics and large scale system interactions
- Understand weather and climate
- Understand natural resources and natural hazards

Earth Science CSET 219

- **Domain 1: Earth's Place in the Universe (Subtest II)**
  - Understand the university and its stars
  - Understand Earth and the solar system
  - Understand the history of planet Earth
- **Domain 2: Earth's Systems (Subtest II)**
  - Understand Earth's materials and systems
  - Understand plate tectonics and large-scale systems
  - Understand oceanography and the role of water in Earth's surface processes
  - Understand the atmosphere, weather, and climate

- **Domain 3: Earth and Human Activity (Subtest II)**
  - Understand natural resources
  - Understand natural hazards
  - Understand human impacts on Earth's systems
  - Understand global climate change