

Some subdisciplines and study fields within the Earth sciences: (https://www.esci.umn.edu/whatis) and other sources.	
Environmental Geology	The interdisciplinary study of the interaction of humans with the geologic environment including the biosphere, the lithosphere, the hydrosphere, and to some extent the atmosphere.
Biomagnetism	The study of magnetic bacteria and their relationship to the earth's magnetic field.
Exploration Geophysics	Application of seismology, gravity and magnetics to the location of petroleum and ore deposits.
Geobiology	The study of processes at the interface between organic and inorganic materials, and the role of microbes on the origin of life.
Geochemistry	The study of the distribution and amounts of chemical elements and their isotopes in minerals, ores, rocks, soils, waters, and the atmosphere.
Geochronology	Study of time in relationship to the history of the earth.
Geologic Mapping and Resource Evaluation	Determining the distribution of different rocks at the earth's surface and economic implications.
Geostatistics	Application of statistics to the analysis of geological and geophysical data.
Hydrogeology	The study of water flow and chemistry at and below the earth's surface.
Mineral Physics	The study of how minerals respond to forces.
Mineralogy	The study of minerals: formation, occurrence, properties, composition, crystal structure, and classification.
Oceanography (Ocean Sciences)	The study of the ocean, including its boundaries and bottom topography, the physics and chemistry of sea water, the types of currents, and the many phases of marine biology.
Paleoclimatology	The study of past climatic and ecological environments.
Paleomagnetism	The study of the magnetic record in rocks and implications for plate tectonics and the origin of the earth's magnetic field.
Paleontology	The study of life in past geologic time, based on fossil plant and animals, their relationships to existing plants, animals and environments, and the chronology of Earth's history.
Petrology	The study of the formation of rocks at depth in the earth.
Sedimentology (Sedimentary Geology)	The scientific study of sedimentary rocks and the processes by which they were formed: the description, classification, and interpretation of sediments. Includes basin analysis, river studies, surface processes, stratigraphy, and geochronology.
Seismology	Study of seismic waves to determine the internal structure of the earth and the origin and location of earthquakes.
Structural Geology and Tectonics	The study of mountain building, movement of tectonic plates, and deformation of the earth's crust.
Administrative Geology	This subdiscipline primarily emphasizes the relations with state administration and the legislature in geology.
Volcanology	The scientific study of the dynamics of volcanoes.
Archeology (combined with Geology at MU)	Similar to anthropology in that it focuses on understanding human culture from the deepest history up until the recent past. It differs from anthropology in that it focuses specifically on analysing material remains such as artifact and architectural remnants. Artifacts might include pottery, stone tools, and bones.