

Earth Science, Environmental Science, and Environmental Engineering: What's the difference if you're interested in the environment?

Environmental Science

How do humans and nature affect each other?

Environmental science blends biology, chemistry, earth science, and policy to look at issues like pollution, conservation, ecosystems, and sustainability. Environmental scientists often measure and monitor problems (water quality, species decline, air pollution) and help inform policy or management decisions, but they're not typically the ones designing physical systems to fix them.

Typical careers: environmental scientist/analyst, conservation scientist, ecologist, policy analyst, environmental consultant.



Environmental Engineering

How do we design and build solutions?

Environmental engineers build the systems that treat drinking water, clean up contaminated soil, control air emissions, or manage waste. This is the "build it" field — it requires a strong math and physics background and typically leads to an ABET-accredited engineering degree, often followed by a Professional Engineer (PE) license.

Typical careers: water/wastewater engineer, environmental consultant engineer, remediation engineer, sustainability/civil engineer.



Earth Science

How does the planet work?

The study of the physical Earth itself, its rocks, oceans, atmosphere, and the natural forces that shape them. Earth scientists ask questions like: How do earthquakes happen? Why do climates shift over time? Where does water flow? This field includes geology, hydrology, meteorology, oceanography, and climatology.

Typical careers: geologist, meteorologist, seismologist, oceanographer, park/museum scientist.



The quick version

Environmental science *studies* the problem. Environmental engineering *builds* the solution. Earth science *explains* the planet underneath both.

Earth Science, Environmental Science, and Environmental Engineering: Which one fits what you want to do?

**"I want to design the systems that solve
environmental problems" →**

Environmental Engineering

2024 Median Pay: \$80,000

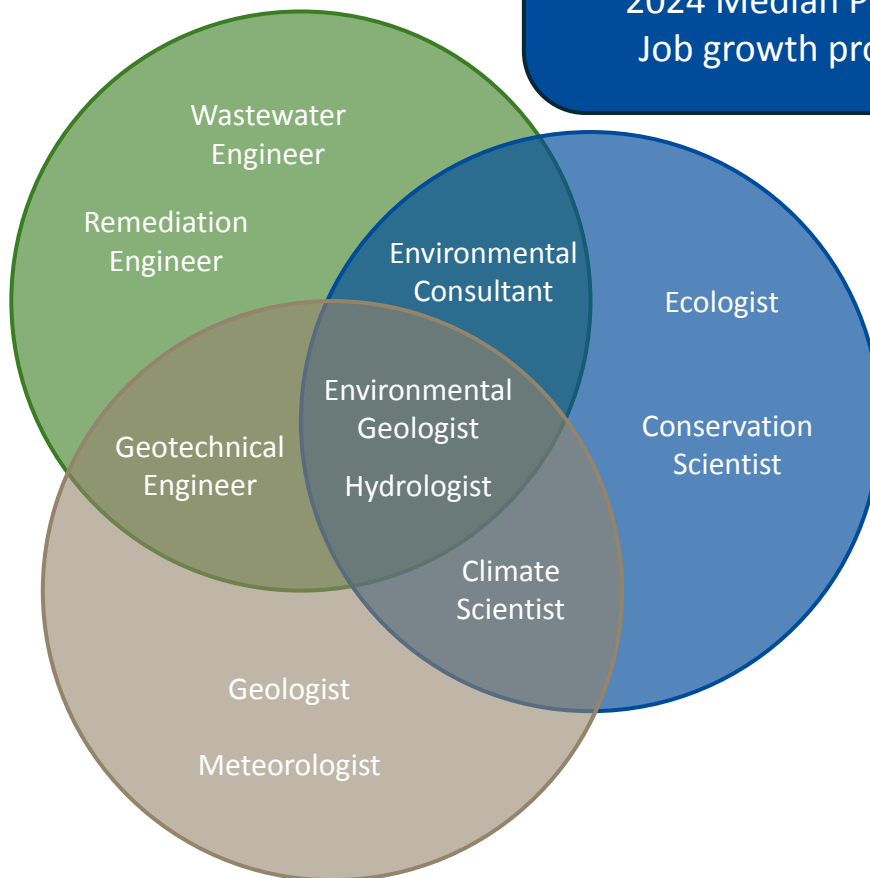
Job growth projection: 4%

**"I want to clean up and prevent
environmental problems" →**

Environmental Science

2024 Median Pay: \$104,000

Job growth projection: 4%



**"I want to know how the planet works and understand
the impacts of environmental problems" →**

Earth Science

2024 Median Pay: \$99,000

Job growth projection: 3%



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