UNIVERSITY OF MONTANA
COLLEGE OF HUMANITIES & SCIENCES

DEPARTMENT OF GEOSCIENCES

The Earth, Water, and Climate Science Curriculum

A STEM degree for students who want to use evidence-based knowledge to address Earth's grand challenges, including: global climate change, water and mineral resource availability and sustainability, natural hazards, and shifting global energy resources.

GEO 316: Getting Started in Research

GEO 409: Careers in Earth, Water, and Climate Science

GEO 428: Field Methods in Earth, Water, and Climate Science

ERTH 101: Earth Systems Science

GEO 498: Internship

GEO 499: Senior Thesis

CSCI 100 OR 150 Computer Programming

ERTH 103: Earth Systems Science Lab

ERTH 194: Getting to Know Earth, Water & Climate Science

MATH 171 & 172 OR MATH 171 & STAT 216: Calculus or Statistics Sequence

GEO 201: The Rocky Planet

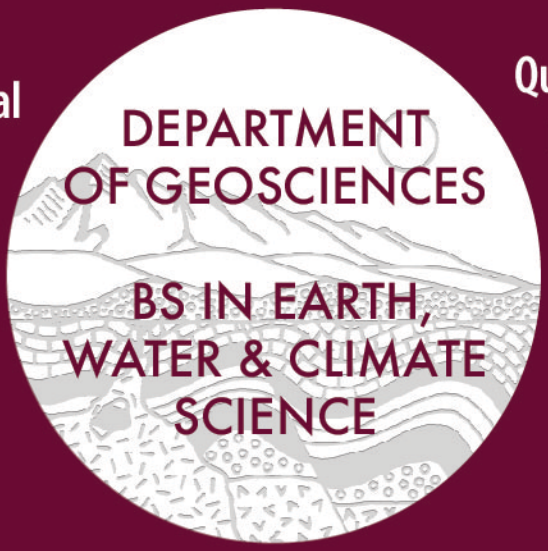
Geo 202: The Water Planet

GEO 308: Computational Methods in Earth, Water, and Climate Science

Experiential Learning, Applied Concepts & Communication
(take 3 credits)

Foundational Concepts

Quantitative Reasoning



Climate Sciences
(take 2)

Related Physical Sciences

ERTH 303: Weather & Climate

GEO 318: Earth's Changing Climate

GEO 322: Energy & the Environment

GEO 488: Snow, Ice, & Climate

NRSM 408: Global Cycles & Climate

CHMY 121 or 141: Chemistry

PHSX 205, 206, 207, & 208 or PHSX 215, 216, 217, & 218: Physics Sequence

Water Sciences
(take 2)

Earth Sciences
(take 2)

GEO 320: Global Water

NRSM 385: Watershed Hydrology

GEO 420: Hydrogeology

GEO 421: Hydrology

GEO 460: Process Geomorphology

GEO 302: Mineralogy

GEO 305: Igneous & Metamorphic Petrology

GEO 321: Earth Resources & Sustainability

GEO 309: Sedimentation & Stratigraphy

GEO 439: Geophysics

GEO 443: Sedimentary Petrology