

Breadth Requirement for Graduate Students in Geological Sciences

Graduate students in Geological Sciences are required to satisfy the breadth requirements by completing courses from the six categories as shown in the table below.

- GEOL MS Students must complete 3 courses from 3 distinct categories
- GEOL PhD Students must complete 4 courses from 4 distinct categories

Students may satisfy the requirement with any course offered for breadth credit in the time period of their matriculation.

Breadth Category	Currently on the 2-Year Teaching Plan	Past and Future Offerings
Volcanology – Geochemistry – Petrology	GEOL/MSCI 521 Introduction to Geochemistry	GEOL 725 Solid-Earth Processes
		GEOL 520 Isotope Geology and Geochronology
Geophysics – Tectonics–Basins	GEOL 548 Environmental Geophysics	GEOL 531 Plate Tectonics
	GEOL 735 Regional Tectonics	GEOL 750 Basin Analysis Seminar
		GEOL556 Seismic Reflection Interpretation
Hydrology - Geomorphology	GEOL/MSCI 501 Principles of Geomorphology	
	GEOL 570/770 Environmental Hydrogeology	
Organic Geochemistry - Biogeochemistry	GEOL 715 Stable Isotope Geochemistry	MSCI/BIOL 752 - Marine Biogeochemistry
	GEOL/MSCI 717 Organic Geochemistry	
	MSCI 503 / BIOL 502 Environmental Microbiology	
Oceanography	GEOL/MSCI 545 Geological Oceanography	GEOL/MSCI 711 Paleoclimatology
	GEOL/MSCI 781 Physical Oceanography	
	GEOL/MSCI 782 Chemical Oceanography	
	GEOL/MSCI 785 Atmospheric Dynamics	
Data Analysis - Geoscience Education	GEOL 542 Methods in Geoscience Education Research	MSCI 509 MATLAB-Based Data Analysis in Oceanography
	GEOL 575/775 Numerical Modeling for Earth Science Applications	

*Students enrolled prior to fall 2019 have the option of adopting this requirement or finishing their degree under the old requirement.

Breadth Course Administration (Updated February 2023)

All graduate-level GEOL and closely related courses on the current two-year teaching plan are eligible to be included in one breadth category. Instructors who wish to offer their course for breadth credit should send a request by email to the SEOE Associate Director who updates the teaching plans and breadth-course list early in the spring semester. Please note that *breadth courses must be suitable for students who will be outside of their areas of specialization*. Courses must be in the 2-year teaching plan at the time they are added to the breadth list. Any course that falls out of the teaching plan will be noted as such on the list. Students may satisfy the requirement with any course offered for breadth credit in the time period of their matriculation.