U.S. Geoscience Enrollments and Degrees Collapse in 2019-2020

U.S. geoscience enrollments, 2019-2020

Enrollments in U.S. geoscience programs experienced marked declines in the 2019-2020 academic year. Though the number of departments reporting enrollments was the same as the prior year, undergraduate enrollments dropped 10% and graduate enrollments dropped 27%. Internal to the graduate programs, enrollments in master’s degree programs dropped 23% while doctoral enrollments dropped 29%.

The decline in undergraduate enrollments extends the ongoing trend, but the decline in graduate enrollments represents the first major deviation in enrollment levels in over a decade. The experiences in 2019-2020 are complicated by the onset of the COVID-19 pandemic. Many programs were shifting to online teaching during the reporting period and may have had uncertainty on the enrollment status of some students. Likewise, disruptions to ongoing research may have also led to underreporting of graduate enrollments. However, the major softening in employment in the energy sector cannot be ruled out as a major driver for the declines, especially at the graduate level. Enrollment reporting for the 2020-21 and 2021-22 academic years will clarify if the pandemic impacts were temporary forces on reported enrollments or exacerbated longer-term trends.

U.S. geoscience degrees granted in 2019-2020

U.S. geoscience degrees awarded have been impacted by recent lower enrollments and potential hits from both the pandemic and softer energy sector hiring. Bachelor’s degrees awarded were down 5% to 3,622, and doctoral degrees were down 1.8% to 873. Most notable was the 31% decline in master’s degrees awarded. This drop could be driven by both a soft job market, for which most master’s students are earning their degree for active employment, and the impacts of the pandemic which could disproportionately impact the more condensed schedule of most master’s programs because of reported project delays in AGI’s COVID-19 study.

Credit: AGI; data from AGI’s Directory of Geoscience Departments Survey