

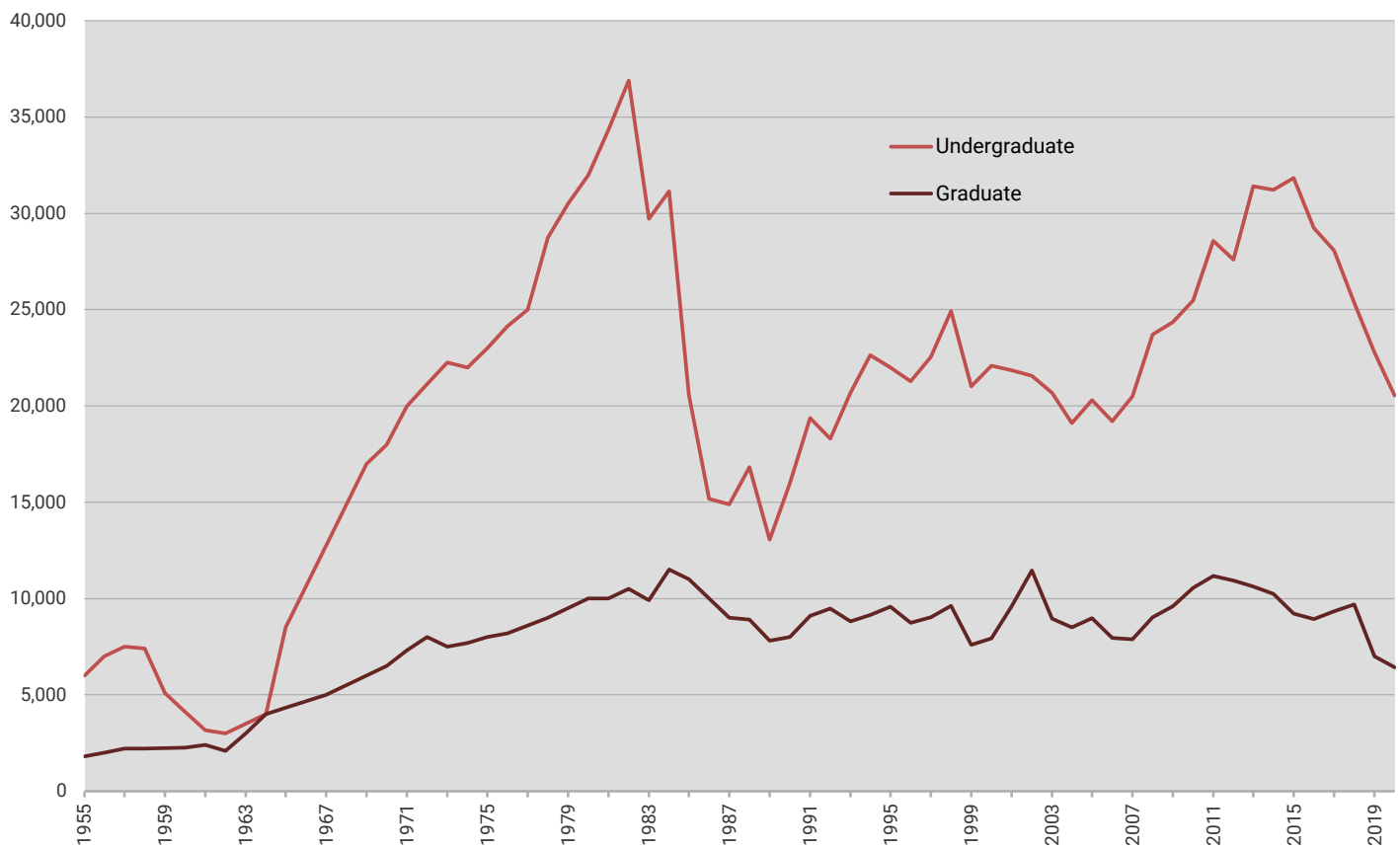


## Geoscience Enrollment and Degrees Continue to Decline through 2021

Geoscience programs in the United States continued to see declines in the number of enrolled students and degrees being awarded through the 2021-22 academic year. The pandemic has exacerbated ongoing negative pressure on enrollments from softening of the oil and gas industry, and now those impacts are seen in degrees granted across all degree levels.

### Enrollment in U.S. Higher Education Geoscience Programs

#### Geoscience Student Enrollment 1955-2021 United States Colleges and Universities



Credit: American Geosciences Institute

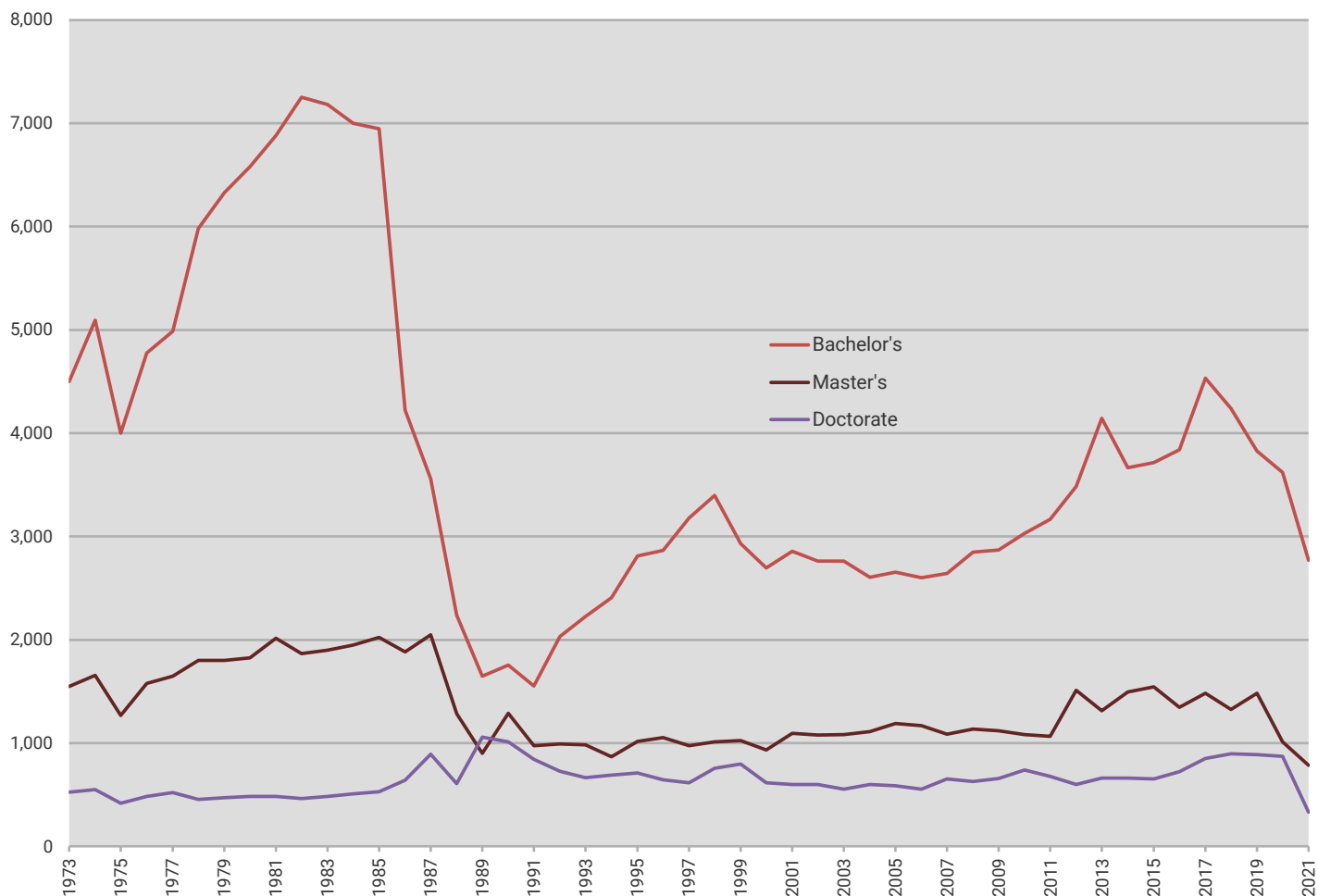
Enrollments in U.S. geoscience programs at both the undergraduate and graduate levels have declined for the last several years. The drop in undergraduate majors was initially driven by a combination of a decline in students using the degree as a gateway to work in the shale oil and gas industry as that sector softened along with an increase in the number of online-only geoscience programs for which identifying majors has proven difficult. More recent declines in undergraduate and graduate geoscience enrollments have been driven by the pandemic and an overall drop in undergraduate enrollments across higher education. Of particular note is the first substantive drop in graduate enrollments since 1980, which was driven by the pandemic through a combination of graduate programs declining to admit new students and general



uncertainty among students about employment prospects and post-graduate plans during the pandemic. The long-term post-pandemic enrollment trajectories for both undergraduate and graduate majors is likely to become evident by 2024.

## Degrees Granted from U.S. Geoscience Higher Education Programs

### U.S. Geoscience Degrees Awarded, 1973 -2021



Credit: American Geosciences Institute

As expected, the trend in degrees awarded mirrors the enrollment pattern. The decline in bachelor's degrees has been underway since 2017 as undergraduate enrollment dropped with the slowdown in the oil and gas industry. Likewise, the step-like increase in master's degrees followed the aggressive hiring in the oil and gas sector and then dropped with the end of that boom. However, the more recent steepening decline across all degree levels reflects impacts of the pandemic, especially in graduate degrees. This drop most likely reflects deferral of graduation by students who were impacted by the pandemic, which aligns with reporting from departments about reducing the number of newly admitted graduate students to clear the backlog of currently enrolled graduate students.

A frequent question about the history of degrees awarded is why it starts in 1973 compared to 1955 as did the enrollments history. This reflects the end of conscription in the United States, and with it a substantial change in student retention patterns, which at the time were considered disruptive enough that tracking was rebased with this reality.