National Center for Science and Engineering Statistics

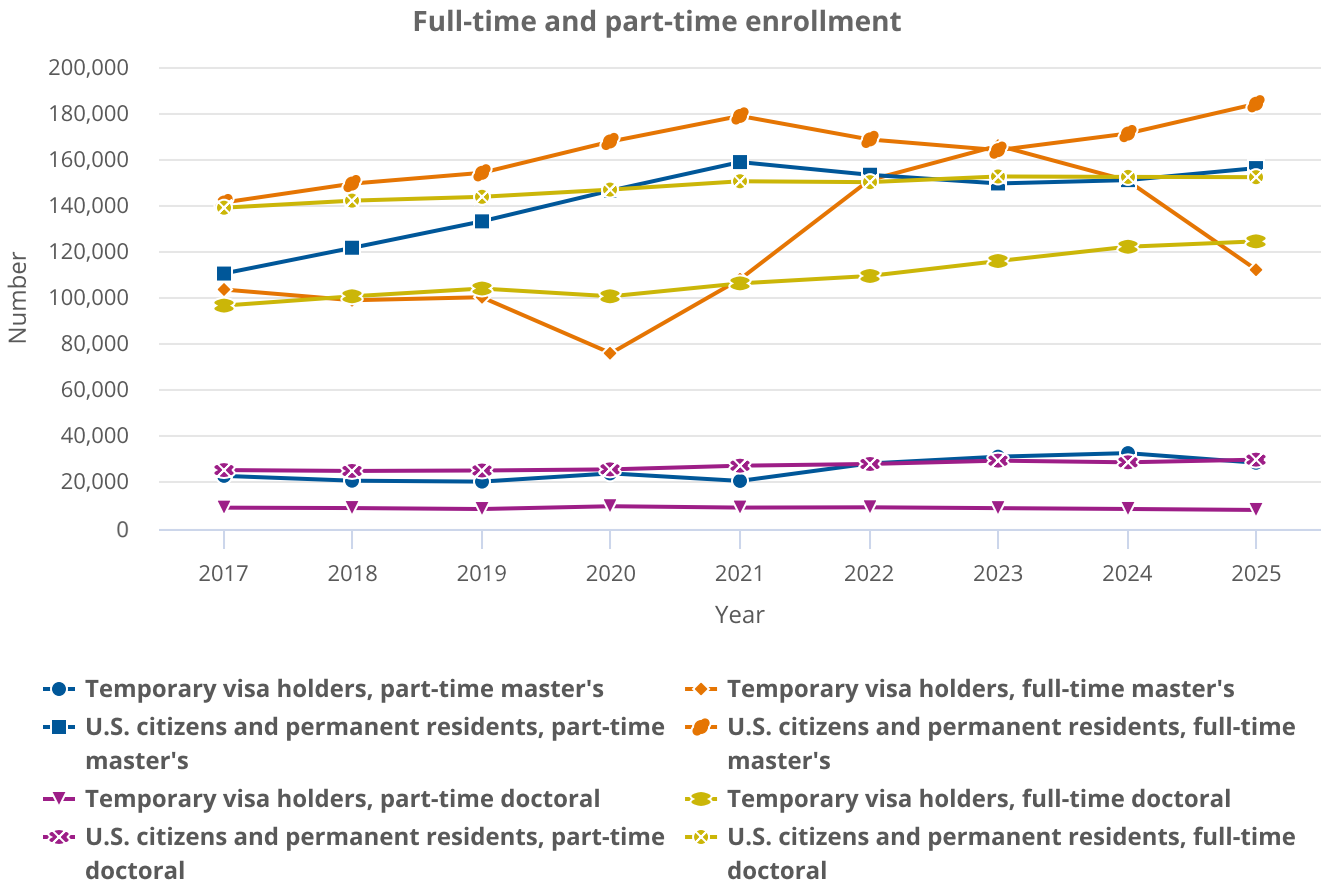
InfoBrief

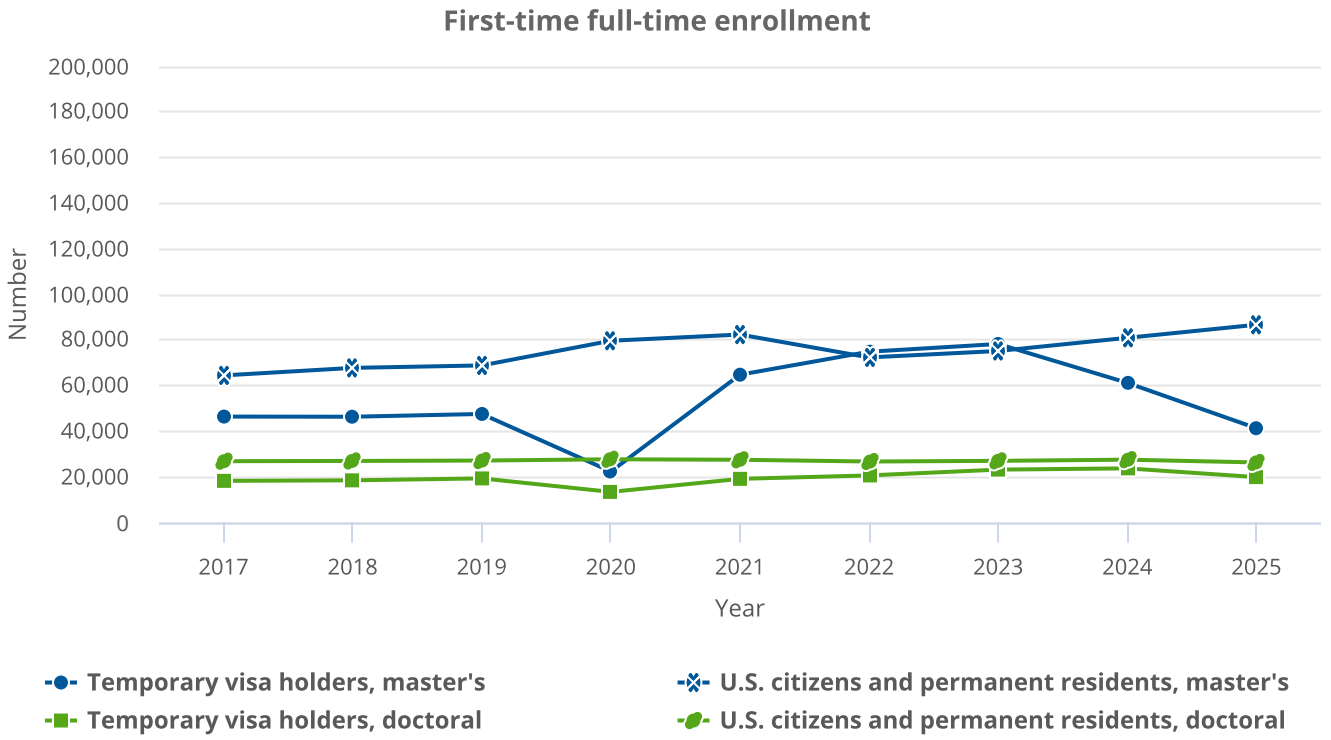
First-Time, Full-Time Enrollment in Master's and Doctoral Programs Declined in Science, Engineering, and Health Fields in 2025

NSF 27-307 | November 18, 2026

From 2024 to 2025, the overall number of graduate students in science, engineering, and health (SEH) fields decreased by 2.7%, from 818,078 to 796,304 (figure 1). This decline was largely driven by decreases in the number of master's degree students, particularly in the number of first-time, full-time temporary visa holders. The overall number of master's degree students decreased by 4.9%, from 505,930 in 2024 to 481,206 in 2025, with a 10.0% decline in first-time, full-time master's degree students (table 1). Similarly, first-time, full-time doctoral enrollment declined by 9.9% during this time, although overall and full-time doctoral enrollment was stable, increasing 0.9% and 0.8%, respectively.

Figure 1. Enrollment of master's and doctoral students in science, engineering, and health fields, by citizenship status and enrollment type: 2017–25





Note(s):
Graduate student data in this table include master's students in health sciences. For more information on the survey fields and comparability of these counts to other data from the National Center for Science and Engineering Statistics, see the survey's "Technical Notes" and table A-6 at https://ncses.nsf.gov/surveys/graduate-students-postdoctorates-s-e/2025#methodology.

Source(s):
National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 1. Enrollment of master's students and doctoral students in science, engineering, and health, by enrollment intensity, sex, citizenship status, race, and ethnicity: 2021–25

(Number)

Characteristic	Master's students							Doctoral students						
						Percent change							Percent change	
	2021	2022	2023	2024	2025	2021–25	2024–25	2021	2022	2023	2024	2025	2021–25	2024–25
All graduate students	466,613	501,311	510,866	505,930	481,206	3.1	-4.9	293,543	297,223	307,229	312,148	315,098	7.3	0.9
Part-time students	179,659	181,693	180,895	183,893	184,905	2.9	0.6	36,674	37,540	38,612	37,547	38,261	4.3	1.9
U.S. citizens and permanent residents[a]	158,843	153,345	149,590	151,033	156,232	-1.6	3.4	27,403	28,145	29,589	28,872	30,020	9.6	4.0
Female	80,120	76,906	75,146	73,621	75,632	-5.6	2.7	13,956	14,630	16,017	15,502	16,397	17.5	5.8
Male	78,723	76,439	74,444	77,412	80,600	2.4	4.1	13,447	13,515	13,572	13,370	13,623	1.3	1.9
Hispanic or Latino	21,809	22,200	22,074	22,960	24,845	13.9	8.2	2,666	2,978	3,064	3,153	3,348	25.6	6.2
Not Hispanic or Latino														
American Indian or Alaska Native	612	537	517	541	506	-17.3	-6.5	175	174	181	186	171	-2.3	-8.1
Asian	18,932	19,522	19,350	21,440	23,441	23.8	9.3	2,218	2,359	2,487	2,570	2,703	21.9	5.2
Black or African American	16,213	15,518	15,939	16,049	16,563	2.2	3.2	2,858	2,977	3,757	3,743	4,078	42.7	9.0
Native Hawaiian or Other Pacific Islander	280	269	296	284	286	2.1	0.7	42	38	53	45	54	28.6	20.0
White	86,873	81,680	77,898	75,188	74,457	-14.3	-1.0	17,071	17,081	17,301	16,367	16,248	-4.8	-0.7
More than one race	5,316	5,079	5,212	5,419	5,815	9.4	7.3	913	874	937	961	1,016	11.3	5.7
Unknown race and ethnicity	8,808	8,540	8,304	9,152	10,319	17.2	12.8	1,460	1,664	1,809	1,847	2,402	64.5	30.0
Temporary visa holders	20,816	28,348	31,305	32,860	28,673	37.7	-12.7	9,271	9,395	9,023	8,675	8,241	-11.1	-5.0
Female	8,308	10,775	12,051	12,807	11,131	34.0	-13.1	3,386	3,452	3,409	3,256	3,209	-5.2	-1.4
Male	12,508	17,573	19,254	20,053	17,542	40.2	-12.5	5,885	5,943	5,614	5,419	5,032	-14.5	-7.1
Full-time students	286,954	319,618	329,971	322,037	296,301	3.3	-8.0	256,869	259,683	268,617	274,601	276,837	7.8	0.8
U.S. citizens and permanent residents[a]	178,812	168,660	164,019	171,182	184,096	3.0	7.5	150,539	150,149	152,610	152,422	152,313	1.2	-0.1
Female	109,032	104,117	100,723	103,238	110,125	1.0	6.7	76,132	77,099	79,638	80,255	81,088	6.5	1.0
Male	69,780	64,543	63,296	67,944	73,971	6.0	8.9	74,407	73,050	72,972	72,167	71,225	-4.3	-1.3
Hispanic or Latino	26,872	26,103	26,025	28,882	30,926	15.1	7.1	17,827	18,340	19,265	19,911	20,290	13.8	1.9
Not Hispanic or Latino														
American Indian or Alaska Native	744	794	694	662	722	-3.0	9.1	574	577	592	554	549	-4.4	-0.9
Asian	21,675	21,351	21,580	23,883	26,423	21.9	10.6	17,378	18,194	19,132	19,938	20,510	18.0	2.9
Black or African American	16,916	15,880	15,825	17,189	18,999	12.3	10.5	9,315	9,641	10,755	10,708	11,085	19.0	3.5
Native Hawaiian or Other Pacific Islander	317	272	248	235	204	-35.6	-13.2	153	159	157	160	166	8.5	3.8
White	97,735	90,532	85,349	84,954	88,741	-9.2	4.5	92,519	90,364	88,929	86,814	84,110	-9.1	-3.1
More than one race	6,985	6,923	6,908	7,369	8,285	18.6	12.4	6,257	6,455	6,947	7,154	7,286	16.4	1.8
Unknown race and ethnicity	7,568	6,805	7,390	8,008	9,796	29.4	22.3	6,516	6,419	6,833	7,183	8,317	27.6	15.8
Temporary visa holders	108,142	150,958	165,952	150,855	112,205	3.8	-25.6	106,330	109,534	116,007	122,179	124,524	17.1	1.9
Female	42,297	57,982	64,271	59,597	45,297	7.1	-24.0	39,648	41,464	44,519	47,435	48,743	22.9	2.8
Male	65,845	92,976	101,681	91,258	66,908	1.6	-26.7	66,682	68,070	71,488	74,744	75,781	13.6	1.4
First-time, full-time students	147,266	147,317	153,545	142,279	128,093	-13.0	-10.0	46,670	47,416	50,253	51,321	46,264	-0.9	-9.9
U.S. citizens and permanent residents[a]	82,441	72,404	75,236	81,016	86,733	5.2	7.1	27,515	26,758	27,049	27,565	26,349	-4.2	-4.4
Female	49,642	44,186	45,178	47,880	50,767	2.3	6.0	14,821	14,464	14,593	14,957	14,436	-2.6	-3.5

Table 1. Enrollment of master's students and doctoral students in science, engineering, and health, by enrollment intensity, sex, citizenship status, race, and ethnicity: 2021–25

(Number)

Characteristic	Master's students							Doctoral students						
						Percent change							Percent change	
	2021	2022	2023	2024	2025	2021–25	2024–25	2021	2022	2023	2024	2025	2021–25	2024–25
Male	32,799	28,218	30,058	33,136	35,966	9.7	8.5	12,694	12,294	12,456	12,608	11,913	-6.2	-5.5
Hispanic or Latino	12,193	10,881	11,666	13,114	13,804	13.2	5.3	3,669	3,579	3,677	3,677	3,523	-4.0	-4.2
Not Hispanic or Latino														
American Indian or Alaska Native	337	353	307	272	335	-0.6	23.2	85	108	86	98	71	-16.5	-27.6
Asian	11,187	10,072	10,810	12,331	13,698	22.4	11.1	3,329	3,384	3,532	3,759	3,626	8.9	-3.5
Black or African American	7,606	6,717	7,360	8,160	8,871	16.6	8.7	2,038	1,850	2,053	2,012	2,015	-1.1	0.1
Native Hawaiian or Other Pacific Islander	150	113	100	92	77	-48.7	-16.3	33	26	24	21	25	-24.2	19.0
White	44,446	38,316	38,430	39,634	41,335	-7.0	4.3	16,060	15,407	15,137	15,126	14,225	-11.4	-6.0
More than one race	3,293	3,141	3,207	3,558	4,126	25.3	16.0	1,195	1,276	1,392	1,381	1,309	9.5	-5.2
Unknown race and ethnicity	3,229	2,811	3,356	3,855	4,487	39.0	16.4	1,106	1,128	1,148	1,491	1,555	40.6	4.3
Temporary visa holders	64,825	74,913	78,309	61,263	41,360	-36.2	-32.5	19,155	20,658	23,204	23,756	19,915	4.0	-16.2
Female	24,757	29,001	30,131	24,683	16,973	-31.4	-31.2	7,451	8,253	9,296	9,450	7,910	6.2	-16.3
Male	40,068	45,912	48,178	36,580	24,387	-39.1	-33.3	11,704	12,405	13,908	14,306	12,005	2.6	-16.1

[a] Race and ethnicity data are available for U.S. citizens and permanent residents only. Hispanic or Latino may be any race; race categories exclude Hispanic origin.

Source(s):
National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

In 2025, doctoral enrollment reached 315,098, the most ever reported to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Declines in the number of graduate students enrolled in SEH programs were larger for temporary visa holders than for U.S. citizens and permanent residents. From 2024 to 2025, 19,903 fewer temporary visa holders began full-time master's degree programs (decrease of 32.5%) and 3,841 fewer temporary visa holders began full-time doctoral programs (down 16.2%) in SEH (table 1 and figure 1).

These and other findings in this InfoBrief are from the 2025 GSS. Data from the GSS provide insight into the composition of the current and future science and engineering workforce by collecting data on graduate students, postdoctoral appointees (postdocs), and doctorate-holding nonfaculty researchers (NFRs) in SEH fields. This survey is funded by the National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation and by the National Institutes of Health (NIH).

Trends in Graduate Enrollment, by Enrollment Intensity and Citizenship Status

In 2025, 296,301 students were enrolled in full-time master's programs, down 8.0% from the 322,037 enrolled in 2024 (table 1). First-time, full-time master's enrollment declined for the second year in a row, with fewer students beginning training in SEH, or a smaller pipeline of future SEH workers. The 10.0% decline in first-time, full-time students from 2024 to 2025, from 142,279 to 128,093 students, follows a drop of 7.3% from 2023 to 2024, from 153,545 to 142,279. Even with declining enrollment for the last 2 years, full-time master's degree enrollment increased by 3.3% from 2021 to 2025, with a peak of 329,971 students in 2023. In contrast to full-time enrollment, part-time master's degree enrollment remained stable,[1] increasing by a modest 0.6% from 2024 to 2025 to 184,905 students and increasing by 2.9% from 2021 to 2025. Part-time doctoral enrollment increased by 1.9% from 2024 to 2025, from 37,547 to 38,261, whereas full-time doctoral enrollment remained stable during this period, increasing by a modest 0.8%, from 274,601 to 276,837.

Although full-time master's degree enrollment declined from 2024 to 2025, full-time doctoral degree enrollment remained stable in 2025 after several years of growth. From 2021 to 2025, overall, doctoral enrollment increased 7.3% to 315,098 students, the highest number ever reported to the GSS (table 1; figure 1). Yet first-time, full-time doctoral enrollment declined by 9.9% from 2024 to 2025 to 46,264 students. From 2021 to 2024, about 18% to 19% of full-time doctoral students were first-time students, but in 2025, this declined to 16.7% of doctoral students. Part-time doctoral enrollment increased by 1.9% from 2024 to 2025, from 37,547 to 38,261, and full-time doctoral enrollment remained stable during this time, increasing by 0.8% to 276,837 students.

Temporary Visa Holders

Continuing the trend that started in 2023, enrollment in SEH programs by temporary visa holders declined from 2024 to 2025, with differences across enrollment intensity and degree type—particularly, first-time, full-time enrollment (table 1). Among first-time, full-time SEH master's degree students, 19,903 (32.5%) fewer temporary visa holders started in 2025 than in 2024. In SEH doctoral degree programs, first-time, full-time students holding temporary visas decreased 16.2% during this period (from 23,756 to 19,915).

Across degree enrollment and enrollment intensity, declines in first-time, full-time enrollment impacted overall counts in different ways. From 2024 to 2025, among temporary visa holders enrolled in master's degree programs, the number enrolled full time decreased by 38,650 students, or 25.6%, and the number enrolled part time decreased by 4,187 students, or 12.7%. Turning to temporary visa holders in doctoral degree programs, part-time student enrollment declined by 5.0% (434 students) from 2024 to 2025, and full-time student enrollment increased by 1.9% (2,345 students). From 2021 to 2025, temporary visa holders enrolled full time in SEH doctoral programs increased 17.1% to 124,524 students.

Among temporary visa holders in SEH programs, the overall graduate enrollment trends between 2024 and 2025 described above apply for both female and male students. In full-time master's degree programs, female enrollment declined by 24.0% (14,300 students) and male enrollment declined by 26.7% (24,350 students). Among part-time master's degree students with temporary visas, female enrollment declined by 13.1% and male enrollment declined by 12.5%. Full-time doctoral enrollment of temporary visa holders increased by 2.8% for women and 1.4% for men, with women making up 39.1% of this group. Turning to part-time doctoral students with temporary visas, female enrollment declined by 1.4% and male enrollment declined by 7.1%.

U.S. Citizens and Permanent Residents

In contrast to the overall trend, enrollment of U.S. citizens and permanent residents in SEH master's programs increased in 2025. First-time, full-time master's enrollment of this group increased by 7.1% from 2024 to 2025, from 81,016 to 86,733 students, with overall full-time enrollment increasing by 7.5% to 184,096 students. Part-time enrollment in master's programs for this group increased by 3.4% during this period to 156,232 students (table 1). These increases in these three groups of master's students (12,914, 5,717, and 5,199, respectively) only partially offset the decline in students with a temporary visa.

The trends among doctoral students differed. The number of U.S. citizens and permanent residents enrolled full-time in SEH doctoral programs remained relatively stable, declining by 109 students, although first-time, full-time enrollment for this group declined by 4.4%, or 1,216 students. Conversely, part-time doctoral enrollment among U.S. citizens and permanent residents increased by 4.0%, or 1,148 students, during this time.

Demographic Trends in Enrollment

Between 2024 and 2025, enrollment patterns by sex varied by degree level and enrollment intensity among U.S. citizens and permanent residents. In master's programs, male enrollment grew more than female enrollment among U.S. citizens and permanent residents, with an increase for males of 8.9% in full-time enrollment from 2024 to 2025, 8.5% in first-time, full-time enrollment, and 4.1% in part-time enrollment, compared with 6.7%, 6.0%, and 2.7%, respectively, for women. The pattern was reversed for doctoral enrollment among U.S. citizens and permanent residents. Full-time doctoral enrollment for men decreased by 1.3%, and female enrollment increased by 1.0%. However, first-time, full-time enrollment in doctoral programs decreased by 5.5% for men and by 3.5% for women. Part-time enrollment grew for men and women by 1.9% and 5.8%, respectively.

Continuing the trend that started in 2023, GSS institutions reported larger numbers and higher percentages of graduate students as race and ethnicity unknown. This presents a challenge for data users because counts by race and ethnicity may not be comparable year to year because the nonreporting of race and ethnicity to institutions may not be random across racial and ethnic groups. The number of full-time master's degree students with unknown race and ethnicity increased by 22.3% (1,788 students) between 2024 and 2025 and by 29.4% (2,228 students) since 2021, with a 1-year change of 16.4% (632 students) and a 5-year change of 39.0% (1,258 students) for first-time, full-time students.[2] For part-time master's degree students, the increase in the number of students reporting race or ethnicity unknown was 12.8% (1,167 students) from 2024 to 2025 and 17.2% (1,511 students) from 2021 to 2025 (table 1). For full-time doctoral students, the number with unknown race or ethnicity increased by 15.8% (1,134 students) since 2024 and by 27.6% (1,801 students) from 2021 to 2025. Although the overall number of first-time, full-time U.S. citizen and permanent resident doctoral students declined, the number of students reported as race or ethnicity unknown increased by 4.3% (64 students). Part-time doctoral students' 1-year percentage change in the number of students reporting unknown race and ethnicity was 30.0% (555 students), and it was 64.5% (942 students) over the 5-year period.

Field of Study Trends for Master's and Doctoral Students

Although overall counts of students in SEH fields of study decreased by 24,724 in master's degree programs and remained stable for doctoral degree programs from 2024 to 2025, this trend varied across fields. Master's degree enrollment decreased in science fields by 5.7%, in engineering fields by 4.3%, and in health fields by 1.1% during this period (table 2). Doctoral enrollment increased slightly in science (1.3%) and remained stable in engineering and health, rising 0.2% and 0.6%, respectively.

Table 2. Enrollment of master's students and doctoral students in science, engineering, and health, by field: 2021–25

(Number)

Characteristic	Master's students							Doctoral students						
						Percent change							Percent change	
	2021	2022	2023	2024	2025	2021–25	2024–25	2021	2022	2023	2024	2025	2021–25	2024–25
All graduate students	466,613	501,311	510,866	505,930	481,206	3.1	-4.9	293,543	297,223	307,229	312,148	315,098	7.3	0.9
Science and engineering	400,922	435,003	449,087	447,040	422,991	5.5	-5.4	276,912	279,163	287,961	293,339	296,167	7.0	1.0
Science	305,796	331,983	348,520	347,469	327,669	7.2	-5.7	203,988	206,183	212,969	216,898	219,611	7.7	1.3
Agricultural and veterinary sciences	6,801	6,949	6,901	6,973	6,692	-1.6	-4.0	4,443	4,647	4,854	5,044	5,068	14.1	0.5
Biological and biomedical sciences	42,728	43,062	44,703	46,661	47,776	11.8	2.4	58,155	59,638	60,863	62,357	62,284	7.1	-0.1
Computer and information sciences	102,199	129,972	143,530	137,358	115,892	13.4	-15.6	19,531	20,583	22,484	24,010	25,193	29.0	4.9
Geosciences, atmospheric, and ocean sciences	5,520	5,186	4,793	4,909	4,898	-11.3	-0.2	6,770	6,784	6,801	6,857	6,834	0.9	-0.3
Mathematics and statistics	20,639	20,798	20,105	19,948	18,790	-9.0	-5.8	13,619	13,589	13,788	14,031	14,207	4.3	1.3
Multidisciplinary and interdisciplinary sciences	11,994	16,931	21,928	26,426	26,282	119.1	-0.5	3,774	4,014	4,501	5,215	5,566	47.5	6.7
Natural resources and conservation	10,012	9,807	9,486	9,150	8,946	-10.6	-2.2	3,910	3,955	4,004	4,182	4,233	8.3	1.2
Physical sciences	6,409	6,256	6,000	6,008	6,217	-3.0	3.5	37,732	37,836	38,329	39,329	39,494	4.7	0.4
Psychology	51,878	48,321	49,474	49,516	51,695	-0.4	4.4	21,447	21,121	24,354	23,408	25,002	16.6	6.8
Social sciences	47,616	44,701	41,600	40,520	40,481	-15.0	-0.1	34,607	34,016	32,991	32,465	31,730	-8.3	-2.3
Engineering	95,126	103,020	100,567	99,571	95,322	0.2	-4.3	72,924	72,980	74,992	76,441	76,556	5.0	0.2
Aerospace, aeronautical, and astronautical engineering	5,065	5,263	5,380	5,563	5,963	17.7	7.2	2,773	2,832	2,884	3,032	3,161	14.0	4.3
Biological, biomedical, and biosystems engineering	5,192	5,177	5,204	5,475	5,694	9.7	4.0	8,867	9,265	9,999	10,330	10,339	16.6	0.1
Chemical, petroleum, and chemical-related engineering	2,983	3,011	2,658	2,664	2,607	-12.6	-2.1	7,713	7,590	7,888	7,935	7,882	2.2	-0.7
Civil, environmental, transportation, and related engineering fields	11,730	12,621	12,082	11,360	10,735	-8.5	-5.5	7,878	7,754	7,852	7,899	7,766	-1.4	-1.7
Electrical, electronics, communications, and computer engineering	27,695	32,316	31,093	30,841	28,746	3.8	-6.8	17,570	17,585	17,706	17,774	17,640	0.4	-0.8
Industrial, manufacturing, systems engineering, and operations research	11,949	12,579	11,873	11,704	10,853	-9.2	-7.3	3,921	3,856	3,889	4,046	4,146	5.7	2.5
Mechanical engineering	15,718	16,029	15,335	15,136	15,105	-3.9	-0.2	11,540	11,523	11,679	11,858	11,986	3.9	1.1
Metallurgical, mining, materials, and related engineering fields	2,518	2,545	2,462	2,503	2,598	3.2	3.8	4,904	4,573	4,782	4,858	4,936	0.7	1.6
Other engineering	12,276	13,479	14,480	14,325	13,021	6.1	-9.1	7,758	8,002	8,313	8,709	8,700	12.1	-0.1
Health	65,691	66,308	61,779	58,890	58,215	-11.4	-1.1	16,631	18,060	19,268	18,809	18,931	13.8	0.6
Clinical medicine and public health	34,021	33,251	28,484	26,645	25,184	-26.0	-5.5	5,612	5,966	6,174	6,399	6,636	18.2	3.7
Other health	31,670	33,057	33,295	32,245	33,031	4.3	2.4	11,019	12,094	13,094	12,410	12,295	11.6	-0.9

Note(s):
For more information on the mapping of fields and codes in the Survey of Graduate Students and Postdoctorates in Science and Engineering, see table A-6 at https://ncses.nsf.gov/surveys/graduate-students-postdoctorates-s-e/2025#technical-tables.

Source(s):
National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS).

Master's Enrollment Trends by Field

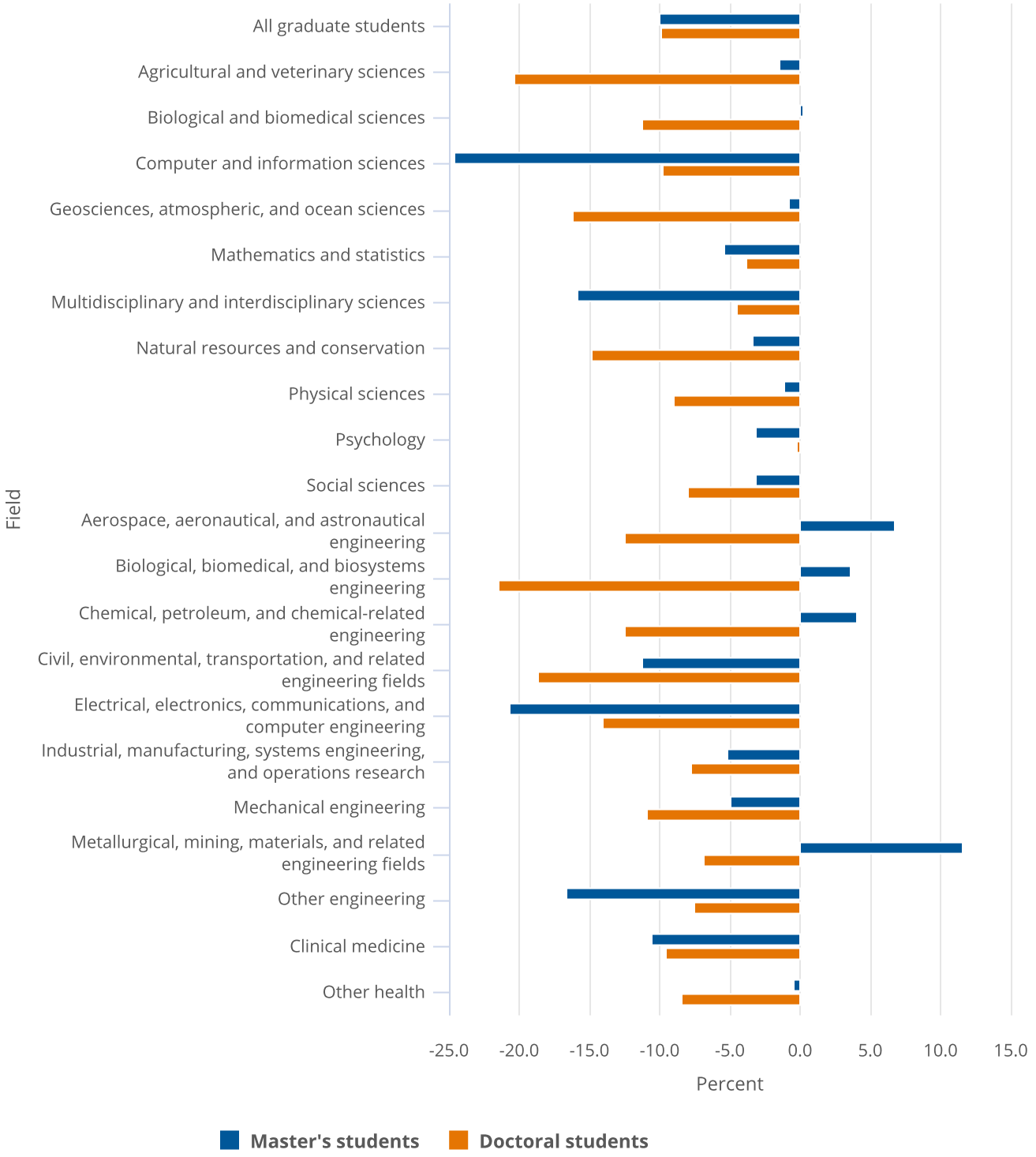
As in previous years, computer and information sciences remains the largest broad field in the GSS, with 24.1% of master's degree students in 2025 (table 2; see survey data tables: table 2-7). From 2021 to 2023, computer and information sciences grew 40.4%. In 2024, however, master's degree enrollments in computer and information sciences declined for the first time since 2021, and this trend continued through 2025. Enrollment in this field decreased by 21,466 students, or 15.6%, from 2024 to 2025.

From 2021 to 2025, master's degree enrollment in a few fields—such as biological and biomedical sciences and aerospace, aeronautical, and astronautical engineering, with total increases of 11.8% and 17.7%, respectively—grew consistently each year (table 2). During this 5-year period, the largest numeric and percentage increase was in multidisciplinary and interdisciplinary sciences enrollment, with a 119.1% increase (from 11,994 to 26,282 students). Within multidisciplinary and interdisciplinary sciences, data science and analytics drove this growth (table 2; also see survey data tables: table 1-2).

Among engineering broad fields, only three fields increased enrollment for master's degrees from 2024 to 2025: aerospace, aeronautical, and astronautical engineering (7.2%); biological, biomedical, and biosystems engineering (4.0%); and metallurgical, mining, materials, and related engineering (3.8%). All the remaining engineering subfields either remained stable or declined, with industrial, manufacturing, systems engineering, and operations research having the largest percentage decline (7.3%) and electrical, electronics, communications, and computer engineering having the largest numeric decline (2,095 students). Health enrollment continued to decline, with a 1.1% decline between 2024 and 2025, mostly due to declining enrollments in clinical medicine and public health (5.5%).

First-time, full-time master's enrollment declined across most fields, with 14,186 fewer students enrolled in 2025 than in 2024 (table 1 and table 2). First-time, full-time master's enrollment in computer and information sciences had the largest decline in the number of students (24.6%), followed by electrical, electronics, communications, and computer engineering (20.7%) (figure 2). Counter to the overall trend, master's first-time, full-time enrollment increased across four smaller engineering fields from 2024 to 2025: aerospace, aeronautical, and astronautical engineering (6.7%); biological, biomedical, and biosystems engineering (3.6%); chemical, petroleum, and chemical-related engineering (4.1%); and metallurgical, mining, materials, and related engineering fields (11.6%).

Figure 2. Change in first-time, full-time enrollment of master's students and doctoral students in science, engineering, and health, by field: 2024–25



Source(s):
National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Doctoral Enrollment Trends by Field

In 2025, doctoral enrollment remained relatively stable, with a total count of 315,098 students across all fields (table 2). Consistent with this, 9 of 21 broad fields had stable counts between 2024 and 2025. From 2024 to 2025, enrollment in science grew by 1.3% (from 216,898 to 219,611) and was stable in engineering (76,556 doctorate students in 2025) and health (18,931 doctorate students in 2025) fields, rising a modest 0.2% and 0.6%, respectively. Over the past 5 years, however, health fields had the largest growth (13.8%), followed by science (7.7%) and engineering (5.0%).

Within science, doctoral enrollment in 8 of the 10 broad fields grew or remained stable every year between 2021 and 2025. Of the remaining science fields, psychology enrollments grew unevenly, dropping 3.9% in 2024 to 23,408 students but rebounding 6.8% in 2025 to 25,002 students. Only social sciences counts declined all years from 2021 to 2025, with an 8.3% decline in enrollment over that period, including a 2.3% decline from 2024 to 2025 (735 students). Biological and biomedical sciences enrollment remained stable (-0.1%) from 2024 to 2025 after 4 years of consistent year-over-year growth. Conversely, multidisciplinary and interdisciplinary sciences enrollment increased by 6.7% (351 students), and computer and information sciences doctoral degree enrollments grew by 4.9% (1,183 students) (table 2).

From 2024 to 2025, first-time, full-time doctoral enrollment declined in every field (figure 2; also see survey data tables: table 2-7). The largest percentage decline in the number of first-time, full-time doctoral students was in biological, biomedical, and biosystems engineering (21.5%), followed by agricultural and veterinary sciences (20.3%). Although overall doctoral enrollment did not decline between 2024 and 2025, total doctoral enrollment reported to the GSS may decline in 2026 unless first-time, full-time doctoral enrollment rebounds.

Trends in Postdoc and Nonfaculty Researcher Employment

After reaching a record high of 69,877 in 2024, the number of SEH postdocs decreased by 2.2% to 68,324 in 2025 (table 3 and table 4). However, the number of NFRs rose by 2.5% in 2025, continuing a 5-year trend of growth (table 4). NFR employment counts increased by 17.9% over the past 5 years, from 30,548 in 2021 to 36,021 in 2025, partially due to improved reporting.

Table 3. Postdoctoral appointees in science, engineering, and health, by sex, citizenship status, race, and ethnicity: 2021–25

(Number)

Characteristic	Postdoctoral appointees						
						Percent change	
	2021	2022	2023	2024	2025	2021–25	2024–25
All surveyed fields	63,328	62,750	65,850	69,877	68,324	7.9	-2.2
U.S. citizens and permanent residents[a]	29,755	27,289	27,701	29,131	29,497	-0.9	1.3
Female	14,275	13,042	13,380	14,341	14,654	2.7	2.2
Male	15,480	14,247	14,321	14,790	14,843	-4.1	0.4
Hispanic or Latino	2,142	2,192	2,352	2,599	2,416	12.8	-7.0
Not Hispanic or Latino							
American Indian or Alaska Native	80	92	111	123	124	55.0	0.8
Asian	6,014	5,286	5,631	5,793	6,093	1.3	5.2
Black or African American	1,138	1,141	1,230	1,389	1,303	14.5	-6.2
Native Hawaiian or Other Pacific Islander	40	34	57	38	40	0.0	5.3
White	16,369	15,221	14,585	14,662	14,654	-10.5	-0.1
More than one race	687	638	694	847	859	25.0	1.4
Unknown race and ethnicity	3,285	2,685	3,041	3,680	4,008	22.0	8.9
Temporary visa holders	33,573	35,461	38,149	40,746	38,827	15.6	-4.7

Table 3. Postdoctoral appointees in science, engineering, and health, by sex, citizenship status, race, and ethnicity: 2021–25

(Number)

Characteristic	Postdoctoral appointees						
						Percent change	
	2021	2022	2023	2024	2025	2021–25	2024–25
Female	12,533	13,670	15,012	16,306	15,642	24.8	-4.1
Male	21,040	21,791	23,137	24,440	23,185	10.2	-5.1

[a] Race and ethnicity data are available for U.S. citizens and permanent residents only. Hispanic or Latino may be any race; race categories exclude Hispanic origin.

Source(s):
National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 4. Postdoctoral appointees and nonfaculty researchers in science, engineering, and health, by field: 2021–25

(Number)

Characteristic	Postdoctoral appointees							Nonfaculty researchers						
						Percent change							Percent change	
	2021	2022	2023	2024	2025	2021–25	2024–25	2021	2022	2023	2024	2025	2021–25	2024–25
All surveyed fields	63,328	62,750	65,850	69,877	68,324	7.9	-2.2	30,548	32,279	34,342	35,142	36,021	17.9	2.5
Science and engineering	45,529	45,008	47,033	49,247	48,722	7.0	-1.1	22,720	23,778	25,175	25,002	25,263	11.2	1.0
Science	37,189	36,673	37,982	39,702	39,233	5.5	-1.2	18,728	19,423	20,600	20,566	20,797	11.0	1.1
Agricultural and veterinary sciences	1,595	1,705	1,993	2,177	2,067	29.6	-5.1	902	1,068	1,238	1,234	1,276	41.5	3.4
Biological and biomedical sciences	20,245	19,585	19,520	20,234	20,467	1.1	1.2	8,187	8,207	8,589	8,795	9,132	11.5	3.8
Computer and information sciences	880	859	987	1,042	1,006	14.3	-3.5	457	507	631	653	580	26.9	-11.2
Geosciences, atmospheric, and ocean sciences	1,797	1,787	1,919	2,043	2,060	14.6	0.8	2,308	2,448	2,455	2,253	2,245	-2.7	-0.4
Mathematics and statistics	1,112	1,110	1,220	1,238	1,243	11.8	0.4	235	251	307	199	208	-11.5	4.5
Multidisciplinary and interdisciplinary sciences	878	840	988	1,061	1,018	15.9	-4.1	816	931	818	890	889	8.9	-0.1
Natural resources and conservation	889	936	937	969	1,000	12.5	3.2	620	605	663	649	707	14.0	8.9
Physical sciences	6,823	6,877	7,220	7,570	7,343	7.6	-3.0	2,895	2,894	3,095	3,093	3,095	6.9	0.1
Psychology	1,325	1,308	1,344	1,392	1,184	-10.6	-14.9	803	786	950	892	836	4.1	-6.3
Social sciences	1,645	1,666	1,854	1,976	1,845	12.2	-6.6	1,505	1,726	1,854	1,908	1,829	21.5	-4.1
Engineering	8,340	8,335	9,051	9,545	9,489	13.8	-0.6	3,992	4,355	4,575	4,436	4,466	11.9	0.7
Aerospace, aeronautical, and astronautical engineering	277	244	254	246	261	-5.8	6.1	144	153	166	167	188	30.6	12.6
Biological, biomedical, and biosystems engineering	1,616	1,540	1,594	1,685	1,656	2.5	-1.7	589	685	674	680	664	12.7	-2.4
Chemical, petroleum, and chemical-related engineering	1,167	1,239	1,501	1,552	1,520	30.2	-2.1	307	313	349	363	341	11.1	-6.1
Civil, environmental, transportation, and related engineering fields	968	1,018	1,070	1,166	1,192	23.1	2.2	479	569	654	583	614	28.2	5.3
Electrical, electronics, communications, and computer engineering	1,275	1,217	1,339	1,381	1,362	6.8	-1.4	755	734	799	698	646	-14.4	-7.4
Industrial, manufacturing, systems engineering, and operations research	127	143	170	162	186	46.5	14.8	107	197	221	164	157	46.7	-4.3
Mechanical engineering	1,200	1,189	1,317	1,459	1,390	15.8	-4.7	529	527	560	566	569	7.6	0.5
Metallurgical, mining, materials, and related engineering fields	562	542	557	588	594	5.7	1.0	259	280	249	260	252	-2.7	-3.1
Other engineering	1,148	1,203	1,249	1,306	1,328	15.7	1.7	823	897	903	955	1,035	25.8	8.4
Health	17,799	17,742	18,817	20,630	19,602	10.1	-5.0	7,828	8,501	9,167	10,140	10,758	37.4	6.1
Clinical medicine	15,561	15,630	16,393	17,919	16,874	8.4	-5.8	6,751	7,351	7,798	8,618	9,249	37.0	7.3
Other health	2,238	2,112	2,424	2,711	2,728	21.9	0.6	1,077	1,150	1,369	1,522	1,509	40.1	-0.9

Note(s):
For more information on the mapping of fields and codes in the Survey of Graduate Students and Postdoctorates in Science and Engineering, see table A-6 at https://ncses.nsf.gov/surveys/graduate-students-postdoctorates-s-e/2025#technical-tables.

Source(s):
National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Demographics of Postdocs

From 2024 to 2025, the number of U.S. citizen and permanent resident postdocs increased by 1.3% (366 postdocs), and postdocs with unknown race or ethnicity grew 8.9% (328 postdocs). Postdocs in all subgroups except for Hispanic or Latino and Black or African American increased or remained stable (table 3). Among U.S. citizens and permanent residents, the number of female postdocs grew by 2.2% (313 postdocs), and the count of male postdocs remained stable, rising 0.4% (53 postdocs). As a result of the increase in the number of female postdocs, almost half (49.7%) of all U.S. citizen and permanent resident postdocs in 2025 were women.

In 2025, the number of postdocs with temporary visas declined 4.7% (1,919 postdocs), with similar percentage decreases for female and male postdocs (4.1%, or 664 female postdocs; 5.1%, or 1,255 male postdocs).

Field of Research

From 2024 to 2025, postdoctoral appointments decreased by 1.2% (469 postdocs) in science and by 5.0% (1,028 postdocs) in health, and they remained stable in engineering (table 4). In 2025, biological and biomedical sciences (20,467 postdocs) and clinical medicine (16,874 postdocs) were the only two fields employing more than 10,000 postdocs; together, they accounted for 54.7% of all postdoctoral appointments in SEH. The largest numeric change in postdocs from 2024 to 2025 was the decline of 1,045 postdocs in clinical medicine (5.8%).

In addition to clinical medicine, several broad fields had notable 1-year changes from 2024 to 2025. In science fields, the number of postdocs in psychology decreased by 14.9% (208 postdocs), in social sciences, by 6.6% (131 postdocs); in agricultural and veterinary sciences, by 5.1% (110 postdocs); and in multidisciplinary and interdisciplinary sciences, by 4.1% (43 postdocs). Each of these declines reversed a multiyear period of growth in postdoc appointments for their respective fields. In engineering fields, no field had a numeric change of more than 70 postdocs, although some fields had large percentage changes. The number of postdocs in other health also remained stable (up 0.6%).

Unlike postdoctoral appointments, NFR employment rose by 2.5% between 2024 and 2025, from 35,142 to 36,021, which is the highest number of NFRs ever reported to the GSS (table 4; see also survey data tables: table 1-1).[3] From 2021 to 2025, the number of NFRs reported to the GSS increased by 17.9% (5,473 NFRs). Despite the overall growth in NFRs, some broad fields declined from 2024 to 2025. From 2024 to 2025, there were 73 fewer NFRs (11.2%) employed in computer and information sciences, 52 fewer NFRs (7.4%) in electrical, electronics, communications, and computer engineering, with similar count declines in psychology (decrease of 56 NFRs, or 6.3%) and social sciences (decrease of 79 NFRs, or 4.1%). Similar to postdoc appointments, biological and biomedical sciences and clinical medicine were the two largest fields, employing about half (51.0%) of NFRs in the GSS. These two fields also had the largest numeric increases in the number of NFRs reported to the GSS, with an additional 631 NFRs, or 7.3%, reported in clinical medicine, and 337 NFRs, or 3.8%, in biological and biomedical sciences (table 4).

Data Sources and Limitations

Conducted since 1966, the GSS is an annual survey of all academic institutions in the United States that grant research-based master's or doctoral degrees in SEH fields. The 2025 GSS collected data from 23,279 organizational units (departments, programs, affiliated research centers, and healthcare facilities) at 635 eligible institutions and their affiliates in the United States, Puerto Rico, and Guam. The institution response rate was 93.1%, and the 2025 GSS unit response rate was 97.8%; an overview of the survey including definitions of key terms is available at https://ncses.nsf.gov/surveys/graduate-students-postdoctorates-s-e/2025#methodology.

In summer 2024, the GSS conducted a comprehensive eligibility review of institutions with six or fewer organizational units in the 2023 GSS. As a result of the eligibility review, 53 institutions were identified as no longer offering research-based master's or doctoral programs in GSS fields and thus were no longer GSS eligible. In 2023, these institutions reported 0.8% of graduate students, including 1.3% of master's students and under 0.1% of doctoral students, postdoctoral appointees, and NFRs. For more information on the eligibility review and the impact on the GSS, see the 2024 survey "Technical Notes" and the publication *Impact of the 2024 GSS Institutional Eligibility Review on Counts of GSS Master's Students*.[4]

GSS health fields are collected under the advisement of NIH. These GSS fields are about a third of all health fields in the Department of Education's Classification of Instructional Programs taxonomy. NIH information on trends seen within these selected health fields can be found at https://report.nih.gov/nihdatabook/.

The full set of data tables from the 2025 survey is available at https://ncses.nsf.gov/surveys/graduate-students-postdoctorates-s-e/2025#data. Data are also available in NCSES's interactive data tool (https://ncsesdata.nsf.gov/builder/gss). For more information about the survey, contact NCSES.

NCSES has reviewed this product for unauthorized disclosure of confidential information and approved its release (NCSES-DRN26-047).

Notes

1 For the GSS, stable is defined as an absolute change of less than 1%, or a percentage change between -0.9% and 0.9%.

2 From 2008 to 2022, the percentage of graduate students who were U.S. citizens or permanent residents with race or ethnicity unknown declined from 9.7% to 4.7% (even as the number of graduate students increased by 12.8%). The overall percentage of U.S. citizen or resident graduate students with race or ethnicity unknown can be found in the full set of data tables: table 1-8. For full-time master's students, the percentage of U.S. citizens or permanent residents with unknown race or ethnicity was 2.6% in 2021, 2.1% in 2022, 2.2% in 2023, 2.5% in 2024 and 3.3% in 2025; for first-time full-time master's students, the percentages were 2.2%, 1.9%, 2.2%, 2.7%, and 3.5%, respectively.

3 The increase in NFRs reported to the GSS is mostly attributable to two very large institutions improving reporting to the GSS after adopting a new data system.

4 See National Center for Science and Engineering Statistics (NCSES). 2025. *Impact of the 2024 GSS Institutional Eligibility Review on Counts of GSS Master's Students*. NSF 25-346. Alexandria, VA: U.S. National Science Foundation. Available at https://ncses.nsf.gov/pubs/nsf25346.

Suggested Citation

National Center for Science and Engineering Statistics (NCSES). 2026. *First-Time, Full-Time Enrollment in Master's and Doctoral Programs Declined in Science, Engineering, and Health Fields in 2025.* NSF 27-307. Alexandria, VA: U.S. National Science Foundation. Available at https://ncses.nsf.gov/pubs/nsf27307/.

Contact Us

National Center for Science and Engineering Statistics
Directorate for Social, Behavioral and Economic Sciences
U.S. National Science Foundation
Tel: (703) 292-8780
FIRS: (800) 877-8339
TDD: (800) 281-8749
Email: ncsesweb@nsf.gov