



National Center for Science and
Engineering Statistics

Survey of Graduate Students and Postdoctorates in Science and Engineering: Fall 2023

Data Tables | NSF 25-317 | January 21, 2025

Contents

General Notes	2
Data Tables	3
Technical Notes	311
Notes	320
Technical Tables	321
Acknowledgments and Suggested Citation	388
Contact Us	389

General Notes

This report presents data from the 2023 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). The GSS is an annual census of all U.S. academic institutions granting research-based master's degrees or doctorates in science, engineering, and selected health (SEH) fields as of fall of the survey year. Results are used to assess shifts in graduate enrollment, shifts in appointments of postdoctoral researchers (postdocs) and doctorate-level nonfaculty researchers (NFRs), and trends in financial support.

The GSS is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation and by the National Institutes of Health.

The tables in this report provide detailed data on master's and doctoral graduate students and postdocs in SEH fields. Trend data are provided on enrollment, postdocs, and NFRs, as well as counts of master's and doctoral students, postdocs, and NFRs by characteristics, such as sex, ethnicity, race, citizenship, field of study or research, and primary source and mechanism of support.

NCSES has reviewed this product for unauthorized disclosure of confidential information and approved its release (NCSES-DRN24-043).

Data Tables

Trends over time

Table	Title
1-1	Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 1975–2023
1-2a	Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 1977–2023
1-2b	Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science: 1977–2023
1-2c	Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering: 1977–2023
1-2d	Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in health: 1977–2023
1-3a	Citizenship of graduate students and postdoctoral appointees in science, engineering, and health: 1980–2023
1-3b	Citizenship of graduate students and postdoctoral appointees in science: 1980–2023
1-3c	Citizenship of graduate students and postdoctoral appointees in engineering: 1980–2023
1-3d	Citizenship of graduate students and postdoctoral appointees in health: 1980–2023
1-4a	Ethnicity and race of U.S. citizen and permanent resident graduate students in science, engineering, and health: 2000–23
1-4b	Ethnicity and race of U.S. citizen and permanent resident graduate students in science: 2000–23
1-4c	Ethnicity and race of U.S. citizen and permanent resident graduate students in engineering: 2000–23
1-4d	Ethnicity and race of U.S. citizen and permanent resident graduate students in health: 2000–23
1-5a	Enrollment intensity of graduate students in science, engineering, and health, by degree program: 1975–2023
1-5b	First-time status among full-time graduate students in science, engineering, and health, by degree level: 1975–2023
1-6	Primary source of support for full-time graduate students in science, engineering, and health: 1975–2023
1-7	Detailed primary source of federal support for full-time graduate students in science, engineering, and health: 1975–2023

Table	Title
1-8	Primary mechanism of support for full-time graduate students in science, engineering, and health: 1975–2023
1-9a	Graduate students in science broad fields: 1975–2023
1-9b	Postdoctoral appointees in science broad fields: 1979–2023
1-9c	Doctorate-holding nonfaculty researchers in science broad fields: 1979–2023
1-10a	Graduate students in engineering broad fields: 1975–2023
1-10b	Postdoctoral appointees in engineering broad fields: 1979–2023
1-10c	Doctorate-holding nonfaculty researchers in engineering broad fields: 1979–2023
1-11a	Master's student enrollment, by detailed fields: 2017–23
1-11b	Doctoral student enrollment, by detailed fields: 2017–23
1-11c	Postdoctoral appointees, by detailed fields: 2017–23
1-11d	Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–23

Demographic characteristics: 2023

Table	Title
2-1	Demographic characteristics of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 2023
2-2a	Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2023
2-2b	Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2023
2-2c	Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in health, by sex: 2023
2-3	Demographic characteristics of master's and doctoral students in science, engineering, and health, by enrollment intensity: 2023
2-4	Graduate students in science, engineering, and health broad fields, by degree program, citizenship, ethnicity, and race: 2023

Financial support: 2023

Table	Title
3-1	Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2023
3-2	Primary source of support for postdoctoral appointees in science, engineering, and health, by broad field: 2023
3-3	Detailed primary source of federal support for full-time graduate students in science, engineering, and health, by broad field: 2023
3-4	Detailed primary source of federal support for postdoctoral appointees in science, engineering, and health, by broad field: 2023
3-5	Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2023
3-6	Primary mechanism of support for postdoctoral appointees in science, engineering, and health, by broad field: 2023

Fields of study: 2023

Table	Title
4-1	Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2023
4-2	Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2023
4-3	Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2023
4-4a	Citizenship, ethnicity, and race of graduate students, by detailed field: 2023
4-4b	Citizenship, ethnicity, and race of master's students, by detailed field: 2023
4-4c	Citizenship, ethnicity, and race of doctoral students, by detailed field: 2023
4-5	Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2023
4-6a	Agricultural and veterinary sciences master's and doctoral student demographics, enrollment status, and funding: 2023
4-6b	Agricultural and veterinary sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

Table	Title
4-7a	Biological and biomedical sciences master's and doctoral student demographics, enrollment status, and funding: 2023
4-7b	Biological and biomedical sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-8a	Computer and information sciences master's and doctoral student demographics, enrollment status, and funding: 2023
4-8b	Computer and information sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-9a	Geosciences, atmospheric, and ocean sciences master's and doctoral student demographics, enrollment status, and funding: 2023
4-9b	Geosciences, atmospheric, and ocean sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-10a	Mathematics and statistics master's and doctoral student demographics, enrollment status, and funding: 2023
4-10b	Mathematics and statistics postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-11a	Multidisciplinary and interdisciplinary sciences master's and doctoral student demographics, enrollment status, and funding: 2023
4-11b	Multidisciplinary and interdisciplinary sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-12a	Natural resources and conservation master's and doctoral student demographics, enrollment status, and funding: 2023
4-12b	Natural resources and conservation postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-13a	Physical sciences master's and doctoral student demographics, enrollment status, and funding: 2023
4-13b	Physical sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-14a	Psychology master's and doctoral student demographics, enrollment status, and funding: 2023
4-14b	Psychology postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-15a	Social sciences master's and doctoral student demographics, enrollment status, and funding: 2023

Table	Title
4-15b	Social sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-16a	Aerospace, aeronautical, and astronautical engineering master's and doctoral student demographics, enrollment status, and funding: 2023
4-16b	Aerospace, aeronautical, and astronautical engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-17a	Biological, biomedical, and biosystems engineering master's and doctoral student demographics, enrollment status, and funding: 2023
4-17b	Biological, biomedical, and biosystems engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-18a	Chemical, petroleum, and chemical-related engineering master's and doctoral student demographics, enrollment status, and funding: 2023
4-18b	Chemical, petroleum, and chemical-related engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-19a	Civil, environmental, transportation and related engineering fields master's and doctoral student demographics, enrollment status, and funding: 2023
4-19b	Civil, environmental, transportation and related engineering fields postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-20a	Electrical, electronics, communications and computer engineering master's and doctoral student demographics, enrollment status, and funding: 2023
4-20b	Electrical, electronics, communications and computer engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-21a	Industrial, manufacturing, systems engineering and operations research master's and doctoral student demographics, enrollment status, and funding: 2023
4-21b	Industrial, manufacturing, systems engineering and operations research postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-22a	Mechanical engineering master's and doctoral student demographics, enrollment status, and funding: 2023
4-22b	Mechanical engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-23a	Metallurgical, mining, materials and related engineering fields master's and doctoral student demographics, enrollment status, and funding: 2023

Table	Title
4-23b	Metallurgical, mining, materials and related engineering fields postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-24a	Other engineering master's and doctoral student demographics, enrollment status, and funding: 2023
4-24b	Other engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-25a	Clinical medicine master's and doctoral student demographics, enrollment status, and funding: 2023
4-25b	Clinical medicine postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023
4-26a	Other health master's and doctoral student demographics, enrollment status, and funding: 2023
4-26b	Other health postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

Institutional characteristics: 2023

Table	Title
5-1	Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields, by institutional control: 2023
5-2	Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields at HBCUs: 2023
5-3	Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health, by broad field and Carnegie classification: 2023
5-4a	Institutional rankings for graduate students: 2023
5-4b	Institutional rankings for master's students: 2023
5-4c	Institutional rankings for doctoral students: 2023
5-5	Institutional rankings for postdoctoral appointees: 2023
5-6	Institutional rankings for doctorate-holding nonfaculty researchers: 2023

TABLE 1-1

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 1975–2023

(Number)

Year	Graduate students				Postdoctoral appointees				Nonfaculty researchers			
	All fields	Science	Engineering	Health	All fields	Science	Engineering	Health	All fields	Science	Engineering	Health
1975	328,510	234,649	68,332	25,529	na	na	na	na	na	na	na	na
1976	333,716	238,675	66,723	28,318	na	na	na	na	na	na	na	na
1977	345,374	242,932	68,757	33,685	na	na	na	na	na	na	na	na
1978 ^a	339,912	236,465	67,787	35,660	na	na	na	na	na	na	na	na
1979	357,578	247,235	71,808	38,535	18,101	12,519	1,067	4,515	2,687	1,915	273	499
1980	367,078	251,265	74,335	41,478	18,399	13,042	981	4,376	3,260	2,184	423	653
1981	375,130	252,404	79,585	43,141	19,634	13,731	1,040	4,863	3,559	2,445	503	611
1982	382,291	255,146	83,720	43,425	19,363	13,698	980	4,685	4,026	2,809	670	547
1983	390,432	255,820	91,146	43,466	20,712	14,562	1,108	5,042	4,896	3,348	631	917
1984	394,670	256,903	92,739	45,028	21,535	14,979	1,203	5,353	5,042	3,442	589	1,011
1985	404,021	261,973	96,018	46,030	22,387	15,576	1,356	5,455	5,103	3,529	615	959
1986	415,520	266,077	101,905	47,538	23,721	16,512	1,405	5,804	4,846	3,356	521	969
1987	421,497	269,256	103,983	48,258	24,881	17,369	1,446	6,066	4,597	3,250	443	904
1988	424,523	272,309	102,854	49,360	26,123	18,024	1,690	6,409	4,869	3,348	566	955
1989	434,478	278,577	104,065	51,836	27,932	18,978	1,928	7,026	4,908	3,470	581	857
1990	452,113	289,383	107,658	55,072	29,565	19,853	1,950	7,762	5,255	3,745	609	901
1991	471,212	299,057	113,535	58,620	30,865	20,595	2,262	8,008	5,478	3,872	659	947
1992	493,522	312,478	118,039	63,005	32,747	21,514	2,369	8,864	5,482	3,660	737	1,085
1993	504,304	318,851	116,872	68,581	34,322	22,219	2,446	9,657	6,001	4,003	805	1,193
1994	504,399	318,118	113,024	73,257	36,377	23,181	2,606	10,590	6,209	4,156	825	1,228
1995	499,640	315,265	107,201	77,174	35,926	23,512	2,648	9,766	6,534	4,395	789	1,350
1996	494,079	311,957	103,224	78,898	37,107	23,892	2,677	10,538	6,604	4,426	731	1,447
1997	487,208	306,482	101,148	79,578	38,481	24,293	2,971	11,217	6,722	4,408	848	1,466
1998	485,627	304,818	100,038	80,771	40,086	25,023	2,853	12,210	7,100	4,497	810	1,793
1999	493,256	309,491	101,691	82,074	40,800	25,784	3,196	11,820	7,573	4,761	940	1,872
2000	493,311	309,424	104,112	79,775	43,115	26,911	3,313	12,891	7,879	4,931	896	2,052
2001	509,607	319,736	109,493	80,378	43,311	27,044	3,152	13,115	7,531	4,707	801	2,023
2002	540,404	335,166	119,668	85,570	45,034	28,371	3,566	13,097	7,906	5,019	903	1,984
2003	567,121	347,268	127,377	92,476	46,728	29,856	3,810	13,062	8,473	5,493	952	2,028
2004	574,463	352,307	123,566	98,590	47,240	30,116	3,949	13,175	9,075	5,880	1,043	2,152
2005	582,226	357,710	120,565	103,951	48,555	30,290	4,166	14,099	9,527	6,069	946	2,512
2006	597,643	363,246	123,041	111,356	49,343	30,245	4,642	14,456	10,814	6,658	1,118	3,038
2007 ^{old} ^b	607,823	372,120	130,255	105,448	50,712	30,986	4,908	14,818	10,736	6,517	1,298	2,921
2007 ^{new} ^b	619,499	384,523	131,676	103,300	50,840	31,281	4,942	14,617	10,752	6,526	1,310	2,916
2008	631,489	391,419	137,856	102,214	54,164	32,741	5,462	15,961	13,747	8,669	1,419	3,659

na = not applicable; master's and doctoral students were not reported separately until 2017, and counts of postdoctoral appointees (postdocs) and nonfaculty researchers (NFRs) were not collected until 1979.

^a Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^b In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^c In 2010, the postdoc and NFR section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^d Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^e In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^f As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Due to changes in reporting, NFR estimates for 2017old are not available.

Note(s):

For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-2a

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 1977–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees					Doctorate-holding nonfaculty researchers				
	Total	Male		Female		Total	Male		Female		Total	Male		Female	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1977	345,374	244,924	70.9	100,450	29.1	na	na	na	na	na	na	na	na	na	na
1978	339,912	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na
1979	357,578	240,839	67.4	116,739	32.6	18,101	14,761	81.5	3,340	18.5	2,687	2,076	77.3	611	22.7
1980	367,078	242,956	66.2	124,122	33.8	18,399	14,856	80.7	3,543	19.3	3,260	2,571	78.9	689	21.1
1981	375,130	243,558	64.9	131,572	35.1	19,634	15,554	79.2	4,080	20.8	3,559	2,809	78.9	750	21.1
1982	382,291	246,298	64.4	135,993	35.6	19,363	14,992	77.4	4,371	22.6	4,026	3,183	79.1	843	20.9
1983	390,432	250,928	64.3	139,504	35.7	20,712	15,919	76.9	4,793	23.1	4,896	3,915	80.0	981	20.0
1984	394,670	252,653	64.0	142,017	36.0	21,535	16,494	76.6	5,041	23.4	5,042	3,896	77.3	1,146	22.7
1985	404,021	258,216	63.9	145,805	36.1	22,387	16,973	75.8	5,414	24.2	5,103	3,826	75.0	1,277	25.0
1986	415,520	264,733	63.7	150,787	36.3	23,721	17,741	74.8	5,980	25.2	4,846	3,586	74.0	1,260	26.0
1987	421,497	267,941	63.6	153,556	36.4	24,881	18,498	74.3	6,383	25.7	4,597	3,354	73.0	1,243	27.0
1988	424,523	265,390	62.5	159,133	37.5	26,123	19,321	74.0	6,802	26.0	4,869	3,603	74.0	1,266	26.0
1989	434,478	268,725	61.9	165,753	38.1	27,932	20,560	73.6	7,372	26.4	4,908	3,623	73.8	1,285	26.2
1990	452,113	275,672	61.0	176,441	39.0	29,565	21,572	73.0	7,993	27.0	5,255	3,879	73.8	1,376	26.2
1991	471,212	284,897	60.5	186,315	39.5	30,865	22,406	72.6	8,459	27.4	5,478	4,026	73.5	1,452	26.5
1992	493,522	294,222	59.6	199,300	40.4	32,747	23,450	71.6	9,297	28.4	5,482	4,036	73.6	1,446	26.4
1993	504,304	294,476	58.4	209,828	41.6	34,322	24,381	71.0	9,941	29.0	6,001	4,376	72.9	1,625	27.1
1994	504,399	288,355	57.2	216,044	42.8	36,377	25,471	70.0	10,906	30.0	6,209	4,487	72.3	1,722	27.7
1995	499,640	279,305	55.9	220,335	44.1	35,926	25,024	69.7	10,902	30.3	6,534	4,785	73.2	1,749	26.8
1996	494,079	271,660	55.0	222,419	45.0	37,107	25,841	69.6	11,266	30.4	6,604	4,692	71.0	1,912	29.0
1997	487,208	264,497	54.3	222,711	45.7	38,481	26,506	68.9	11,975	31.1	6,722	4,733	70.4	1,989	29.6
1998	485,627	261,019	53.7	224,608	46.3	40,086	27,249	68.0	12,837	32.0	7,100	4,985	70.2	2,115	29.8
1999	493,256	262,675	53.3	230,581	46.7	40,800	27,831	68.2	12,969	31.8	7,573	5,244	69.2	2,329	30.8
2000	493,311	262,109	53.1	231,202	46.9	43,115	29,606	68.7	13,509	31.3	7,879	5,493	69.7	2,386	30.3
2001	509,607	271,155	53.2	238,452	46.8	43,311	29,310	67.7	14,001	32.3	7,531	5,041	66.9	2,490	33.1
2002	540,404	287,059	53.1	253,345	46.9	45,034	29,850	66.3	15,184	33.7	7,906	5,329	67.4	2,577	32.6
2003	567,121	298,682	52.7	268,439	47.3	46,728	30,692	65.7	16,036	34.3	8,473	5,700	67.3	2,773	32.7
2004	574,463	296,714	51.7	277,749	48.3	47,240	30,867	65.3	16,373	34.7	9,075	6,049	66.7	3,026	33.3
2005	582,226	295,291	50.7	286,935	49.3	48,555	31,515	64.9	17,040	35.1	9,527	6,305	66.2	3,222	33.8
2006	597,643	299,818	50.2	297,825	49.8	49,343	31,760	64.4	17,583	35.6	10,814	7,190	66.5	3,624	33.5
2007old ^a	607,823	308,152	50.7	299,671	49.3	50,712	32,860	64.8	17,852	35.2	10,736	7,060	65.8	3,676	34.2
2007new ^a	619,499	312,009	50.4	307,490	49.6	50,840	32,942	64.8	17,898	35.2	10,752	7,065	65.7	3,687	34.3
2008	631,489	320,310	50.7	311,179	49.3	54,164	33,943	62.7	20,221	37.3	13,747	8,667	63.0	5,080	37.0
2009	631,645	328,525	52.0	303,120	48.0	57,805	35,987	62.3	21,818	37.7	14,059	8,795	62.6	5,264	37.4

na = not applicable; master's and doctoral students were not reported separately until 2017, and data on postdoctoral appointees (postdocs) and nonfaculty researchers (NFRs) were not collected until 1979. NA = not available; master's-granting institutions were not surveyed in 1978, and the survey of doctorate-granting institutions did not collect data by sex.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^e As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Due to changes in reporting, NFR estimates for 2017old are not available.

Note(s):

Percentages may not add to total because of rounding. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-2b

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science: 1977–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees					Doctorate-holding nonfaculty researchers				
	Total	Male		Female		Total	Male		Female		Total	Male		Female	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1977	242,932	168,724	69.5	74,208	30.5	na	na	na	na	na	na	na	na	na	na
1978	236,465	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na
1979	247,235	163,845	66.3	83,390	33.7	12,519	10,045	80.2	2,474	19.8	1,915	1,448	75.6	467	24.4
1980	251,265	163,212	65.0	88,053	35.0	13,042	10,427	79.9	2,615	20.1	2,184	1,662	76.1	522	23.9
1981	252,404	160,306	63.5	92,098	36.5	13,731	10,859	79.1	2,872	20.9	2,445	1,910	78.1	535	21.9
1982	255,146	160,354	62.8	94,792	37.2	13,698	10,538	76.9	3,160	23.1	2,809	2,177	77.5	632	22.5
1983	255,820	159,126	62.2	96,694	37.8	14,562	11,191	76.9	3,371	23.1	3,348	2,659	79.4	689	20.6
1984	256,903	159,672	62.2	97,231	37.8	14,979	11,446	76.4	3,533	23.6	3,442	2,654	77.1	788	22.9
1985	261,973	162,435	62.0	99,538	38.0	15,576	11,724	75.3	3,852	24.7	3,529	2,637	74.7	892	25.3
1986	266,077	164,075	61.7	102,002	38.3	16,512	12,288	74.4	4,224	25.6	3,356	2,456	73.2	900	26.8
1987	269,256	165,060	61.3	104,196	38.7	17,369	12,845	74.0	4,524	26.0	3,250	2,379	73.2	871	26.8
1988	272,309	164,199	60.3	108,110	39.7	18,024	13,282	73.7	4,742	26.3	3,348	2,483	74.2	865	25.8
1989	278,577	166,313	59.7	112,264	40.3	18,978	13,845	73.0	5,133	27.0	3,470	2,554	73.6	916	26.4
1990	289,383	170,340	58.9	119,043	41.1	19,853	14,426	72.7	5,427	27.3	3,745	2,804	74.9	941	25.1
1991	299,057	173,925	58.2	125,132	41.8	20,595	14,882	72.3	5,713	27.7	3,872	2,862	73.9	1,010	26.1
1992	312,478	179,486	57.4	132,992	42.6	21,514	15,336	71.3	6,178	28.7	3,660	2,727	74.5	933	25.5
1993	318,851	180,001	56.5	138,850	43.5	22,219	15,724	70.8	6,495	29.2	4,003	2,930	73.2	1,073	26.8
1994	318,118	177,057	55.7	141,061	44.3	23,181	16,218	70.0	6,963	30.0	4,156	3,022	72.7	1,134	27.3
1995	315,265	173,068	54.9	142,197	45.1	23,512	16,335	69.5	7,177	30.5	4,395	3,245	73.8	1,150	26.2
1996	311,957	168,540	54.0	143,417	46.0	23,892	16,585	69.4	7,307	30.6	4,426	3,185	72.0	1,241	28.0
1997	306,482	163,191	53.2	143,291	46.8	24,293	16,745	68.9	7,548	31.1	4,408	3,151	71.5	1,257	28.5
1998	304,818	160,379	52.6	144,439	47.4	25,023	17,080	68.3	7,943	31.7	4,497	3,182	70.8	1,315	29.2
1999	309,491	160,982	52.0	148,509	48.0	25,784	17,545	68.0	8,239	32.0	4,761	3,312	69.6	1,449	30.4
2000	309,424	159,691	51.6	149,733	48.4	26,911	18,456	68.6	8,455	31.4	4,931	3,447	69.9	1,484	30.1
2001	319,736	164,574	51.5	155,162	48.5	27,044	18,275	67.6	8,769	32.4	4,707	3,150	66.9	1,557	33.1
2002	335,166	171,516	51.2	163,650	48.8	28,371	18,844	66.4	9,527	33.6	5,019	3,369	67.1	1,650	32.9
2003	347,268	176,458	50.8	170,810	49.2	29,856	19,675	65.9	10,181	34.1	5,493	3,691	67.2	1,802	32.8
2004	352,307	177,714	50.4	174,593	49.6	30,116	19,835	65.9	10,281	34.1	5,880	3,877	65.9	2,003	34.1
2005	357,710	178,297	49.8	179,413	50.2	30,290	19,791	65.3	10,499	34.7	6,069	4,042	66.6	2,027	33.4
2006	363,246	180,084	49.6	183,162	50.4	30,245	19,542	64.6	10,703	35.4	6,658	4,460	67.0	2,198	33.0
2007old ^a	372,120	183,799	49.4	188,321	50.6	30,986	20,339	65.6	10,647	34.4	6,517	4,327	66.4	2,190	33.6
2007new ^a	384,523	187,722	48.8	196,801	51.2	31,281	20,532	65.6	10,749	34.4	6,526	4,332	66.4	2,194	33.6
2008	391,419	190,959	48.8	200,460	51.2	32,741	20,760	63.4	11,981	36.6	8,669	5,497	63.4	3,172	36.6
2009	401,008	196,577	49.0	204,431	51.0	34,388	21,616	62.9	12,772	37.1	8,698	5,421	62.3	3,277	37.7

na = not applicable; master's and doctoral students were not reported separately until 2017, and data on postdoctoral appointees (postdocs) and nonfaculty researchers (NFRs) were not collected until 1979. NA = not available; master's-granting institutions were not surveyed in 1978, and the survey of doctorate-granting institutions did not collect data by sex.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2010, the postdoc and NFR section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^e As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Due to changes in reporting, NFR estimates for 2017old are not available.

Note(s):

Percentages may not add to total because of rounding.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-2c

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering: 1977–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees					Doctorate-holding nonfaculty researchers				
	Total	Male		Female		Total	Male		Female		Total	Male		Female	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1977	68,757	65,051	94.6	3,706	5.4	na	na	na	na	na	na	na	na	na	na
1978	67,787	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na
1979	71,808	65,921	91.8	5,887	8.2	1,067	1,017	95.3	50	4.7	273	260	95.2	13	4.8
1980	74,335	67,995	91.5	6,340	8.5	981	916	93.4	65	6.6	423	398	94.1	25	5.9
1981	79,585	71,838	90.3	7,747	9.7	1,040	958	92.1	82	7.9	503	471	93.6	32	6.4
1982	83,720	74,943	89.5	8,777	10.5	980	896	91.4	84	8.6	670	638	95.2	32	4.8
1983	91,146	81,337	89.2	9,809	10.8	1,108	1,019	92.0	89	8.0	631	596	94.5	35	5.5
1984	92,739	82,440	88.9	10,299	11.1	1,203	1,119	93.0	84	7.0	589	554	94.1	35	5.9
1985	96,018	84,935	88.5	11,083	11.5	1,356	1,255	92.6	101	7.4	615	564	91.7	51	8.3
1986	101,905	89,532	87.9	12,373	12.1	1,405	1,273	90.6	132	9.4	521	476	91.4	45	8.6
1987	103,983	91,012	87.5	12,971	12.5	1,446	1,297	89.7	149	10.3	443	399	90.1	44	9.9
1988	102,854	89,726	87.2	13,128	12.8	1,690	1,518	89.8	172	10.2	566	515	91.0	51	9.0
1989	104,065	90,457	86.9	13,608	13.1	1,928	1,750	90.8	178	9.2	581	525	90.4	56	9.6
1990	107,658	92,979	86.4	14,679	13.6	1,950	1,744	89.4	206	10.6	609	553	90.8	56	9.2
1991	113,535	97,837	86.2	15,698	13.8	2,262	2,024	89.5	238	10.5	659	600	91.0	59	9.0
1992	118,039	100,819	85.4	17,220	14.6	2,369	2,118	89.4	251	10.6	737	667	90.5	70	9.5
1993	116,872	99,184	84.9	17,688	15.1	2,446	2,164	88.5	282	11.5	805	728	90.4	77	9.6
1994	113,024	94,974	84.0	18,050	16.0	2,606	2,272	87.2	334	12.8	825	734	89.0	91	11.0
1995	107,201	89,188	83.2	18,013	16.8	2,648	2,327	87.9	321	12.1	789	701	88.8	88	11.2
1996	103,224	84,970	82.3	18,254	17.7	2,677	2,362	88.2	315	11.8	731	646	88.4	85	11.6
1997	101,148	82,428	81.5	18,720	18.5	2,971	2,625	88.4	346	11.6	848	733	86.4	115	13.6
1998	100,038	81,050	81.0	18,988	19.0	2,853	2,470	86.6	383	13.4	810	721	89.0	89	11.0
1999	101,691	81,804	80.4	19,887	19.6	3,196	2,727	85.3	469	14.7	940	815	86.7	125	13.3
2000	104,112	83,366	80.1	20,746	19.9	3,313	2,840	85.7	473	14.3	896	783	87.4	113	12.6
2001	109,493	87,236	79.7	22,257	20.3	3,152	2,666	84.6	486	15.4	801	691	86.3	110	13.7
2002	119,668	94,701	79.1	24,967	20.9	3,566	2,963	83.1	603	16.9	903	774	85.7	129	14.3
2003	127,377	99,790	78.3	27,587	21.7	3,810	3,207	84.2	603	15.8	952	816	85.7	136	14.3
2004	123,566	96,294	77.9	27,272	22.1	3,949	3,245	82.2	704	17.8	1,043	924	88.6	119	11.4
2005	120,565	93,670	77.7	26,895	22.3	4,166	3,436	82.5	730	17.5	946	824	87.1	122	12.9
2006	123,041	95,097	77.3	27,944	22.7	4,642	3,819	82.3	823	17.7	1,118	974	87.1	144	12.9
2007old ^a	130,255	100,281	77.0	29,974	23.0	4,908	4,073	83.0	835	17.0	1,298	1,104	85.1	194	14.9
2007new ^a	131,676	101,204	76.9	30,472	23.1	4,942	4,099	82.9	843	17.1	1,310	1,116	85.2	194	14.8
2008	137,856	106,319	77.1	31,537	22.9	5,462	4,359	79.8	1,103	20.2	1,419	1,169	82.4	250	17.6
2009	144,677	111,359	77.0	33,318	23.0	6,416	5,031	78.4	1,385	21.6	1,737	1,451	83.5	286	16.5

na = not applicable; master's and doctoral students were not reported separately until 2017, and data on postdoctoral appointees (postdocs) and nonfaculty researchers (NFRs) were not collected until 1979. NA = not available; master's-granting institutions were not surveyed in 1978, and the survey of doctorate-granting institutions did not collect data by sex.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2010, the postdoc and NFR section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^e As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Due to changes in reporting, NFR estimates for 2017old are not available.

Note(s):

Percentages may not add to total because of rounding.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-2d

Sex of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in health: 1977–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees					Doctorate-holding nonfaculty researchers				
	Total	Male		Female		Total	Male		Female		Total	Male		Female	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1977	33,685	11,149	33.1	22,536	66.9	na	na	na	na	na	na	na	na	na	na
1978	35,660	NA	NA	NA	NA	na	na	na	na	na	na	na	na	na	na
1979	38,535	11,073	28.7	27,462	71.3	4,515	3,699	81.9	816	18.1	499	368	73.7	131	26.3
1980	41,478	11,749	28.3	29,729	71.7	4,376	3,513	80.3	863	19.7	653	511	78.3	142	21.7
1981	43,141	11,414	26.5	31,727	73.5	4,863	3,737	76.8	1,126	23.2	611	428	70.0	183	30.0
1982	43,425	11,001	25.3	32,424	74.7	4,685	3,558	75.9	1,127	24.1	547	368	67.3	179	32.7
1983	43,466	10,465	24.1	33,001	75.9	5,042	3,709	73.6	1,333	26.4	917	660	72.0	257	28.0
1984	45,028	10,541	23.4	34,487	76.6	5,353	3,929	73.4	1,424	26.6	1,011	688	68.1	323	31.9
1985	46,030	10,846	23.6	35,184	76.4	5,455	3,994	73.2	1,461	26.8	959	625	65.2	334	34.8
1986	47,538	11,126	23.4	36,412	76.6	5,804	4,180	72.0	1,624	28.0	969	654	67.5	315	32.5
1987	48,258	11,869	24.6	36,389	75.4	6,066	4,356	71.8	1,710	28.2	904	576	63.7	328	36.3
1988	49,360	11,465	23.2	37,895	76.8	6,409	4,521	70.5	1,888	29.5	955	605	63.4	350	36.6
1989	51,836	11,955	23.1	39,881	76.9	7,026	4,965	70.7	2,061	29.3	857	544	63.5	313	36.5
1990	55,072	12,353	22.4	42,719	77.6	7,762	5,402	69.6	2,360	30.4	901	522	57.9	379	42.1
1991	58,620	13,135	22.4	45,485	77.6	8,008	5,500	68.7	2,508	31.3	947	564	59.6	383	40.4
1992	63,005	13,917	22.1	49,088	77.9	8,864	5,996	67.6	2,868	32.4	1,085	642	59.2	443	40.8
1993	68,581	15,291	22.3	53,290	77.7	9,657	6,493	67.2	3,164	32.8	1,193	718	60.2	475	39.8
1994	73,257	16,324	22.3	56,933	77.7	10,590	6,981	65.9	3,609	34.1	1,228	731	59.5	497	40.5
1995	77,174	17,049	22.1	60,125	77.9	9,766	6,362	65.1	3,404	34.9	1,350	839	62.1	511	37.9
1996	78,898	18,150	23.0	60,748	77.0	10,538	6,894	65.4	3,644	34.6	1,447	861	59.5	586	40.5
1997	79,578	18,878	23.7	60,700	76.3	11,217	7,136	63.6	4,081	36.4	1,466	849	57.9	617	42.1
1998	80,771	19,590	24.3	61,181	75.7	12,210	7,699	63.1	4,511	36.9	1,793	1,082	60.3	711	39.7
1999	82,074	19,889	24.2	62,185	75.8	11,820	7,559	64.0	4,261	36.0	1,872	1,117	59.7	755	40.3
2000	79,775	19,052	23.9	60,723	76.1	12,891	8,310	64.5	4,581	35.5	2,052	1,263	61.5	789	38.5
2001	80,378	19,345	24.1	61,033	75.9	13,115	8,369	63.8	4,746	36.2	2,023	1,200	59.3	823	40.7
2002	85,570	20,842	24.4	64,728	75.6	13,097	8,043	61.4	5,054	38.6	1,984	1,186	59.8	798	40.2
2003	92,476	22,434	24.3	70,042	75.7	13,062	7,810	59.8	5,252	40.2	2,028	1,193	58.8	835	41.2
2004	98,590	22,706	23.0	75,884	77.0	13,175	7,787	59.1	5,388	40.9	2,152	1,248	58.0	904	42.0
2005	103,951	23,324	22.4	80,627	77.6	14,099	8,288	58.8	5,811	41.2	2,512	1,439	57.3	1,073	42.7
2006	111,356	24,637	22.1	86,719	77.9	14,456	8,399	58.1	6,057	41.9	3,038	1,756	57.8	1,282	42.2
2007old ^a	105,448	24,072	22.8	81,376	77.2	14,818	8,448	57.0	6,370	43.0	2,921	1,629	55.8	1,292	44.2
2007new ^a	103,300	23,083	22.3	80,217	77.7	14,617	8,311	56.9	6,306	43.1	2,916	1,617	55.5	1,299	44.5
2008	102,214	23,032	22.5	79,182	77.5	15,961	8,824	55.3	7,137	44.7	3,659	2,001	54.7	1,658	45.3
2009	85,960	20,589	24.0	65,371	76.0	17,001	9,340	54.9	7,661	45.1	3,624	1,923	53.1	1,701	46.9

na = not applicable; master's and doctoral students were not reported separately until 2017, and data on postdoctoral appointees (postdocs) and nonfaculty researchers (NFRs) were not collected until 1979. NA = not available; master's-granting institutions were not surveyed in 1978, and the survey of doctorate-granting institutions did not collect data by sex.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2010, the postdoc and NFR section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^e As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Due to changes in reporting, NFR estimates for 2017old are not available.

Note(s):

Percentages may not add to total because of rounding. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-3a

Citizenship of graduate students and postdoctoral appointees in science, engineering, and health: 1980–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1980	367,078	316,776	86.3	50,302	13.7	18,399	11,893	64.6	6,506	35.4
1981	375,130	320,655	85.5	54,475	14.5	19,634	12,340	62.9	7,294	37.1
1982	382,291	314,458	82.3	67,833	17.7	19,363	12,129	62.6	7,234	37.4
1983	390,432	317,185	81.2	73,247	18.8	20,712	13,193	63.7	7,519	36.3
1984	394,670	319,648	81.0	75,022	19.0	21,535	13,548	62.9	7,987	37.1
1985	404,021	324,081	80.2	79,940	19.8	22,387	13,528	60.4	8,859	39.6
1986	415,520	328,234	79.0	87,286	21.0	23,721	14,041	59.2	9,680	40.8
1987	421,497	329,350	78.1	92,147	21.9	24,881	14,133	56.8	10,748	43.2
1988	424,523	327,279	77.1	97,244	22.9	26,123	14,420	55.2	11,703	44.8
1989	434,478	332,503	76.5	101,975	23.5	27,932	14,863	53.2	13,069	46.8
1990	452,113	345,047	76.3	107,066	23.7	29,565	15,115	51.1	14,450	48.9
1991	471,212	358,025	76.0	113,187	24.0	30,865	15,135	49.0	15,730	51.0
1992	493,522	379,605	76.9	113,917	23.1	32,747	15,800	48.2	16,947	51.8
1993	504,304	393,985	78.1	110,319	21.9	34,322	16,727	48.7	17,595	51.3
1994	504,399	397,852	78.9	106,547	21.1	36,377	17,986	49.4	18,391	50.6
1995	499,640	396,755	79.4	102,885	20.6	35,926	18,142	50.5	17,784	49.5
1996	494,079	391,095	79.2	102,984	20.8	37,107	18,412	49.6	18,695	50.4
1997	487,208	383,327	78.7	103,881	21.3	38,481	18,916	49.2	19,565	50.8
1998	485,627	378,560	78.0	107,067	22.0	40,086	19,710	49.2	20,376	50.8
1999	493,256	377,802	76.6	115,454	23.4	40,800	18,884	46.3	21,916	53.7
2000	493,311	364,894	74.0	128,417	26.0	43,115	19,452	45.1	23,663	54.9
2001	509,607	368,737	72.4	140,870	27.6	43,311	18,379	42.4	24,932	57.6
2002	540,404	387,416	71.7	152,988	28.3	45,034	19,663	43.7	25,371	56.3
2003	567,121	412,105	72.7	155,016	27.3	46,728	19,663	42.1	27,065	57.9
2004	574,463	423,218	73.7	151,245	26.3	47,240	20,156	42.7	27,084	57.3
2005	582,226	434,730	74.7	147,496	25.3	48,555	21,507	44.3	27,048	55.7
2006	597,643	446,625	74.7	151,018	25.3	49,343	21,147	42.9	28,196	57.1
2007old ^a	607,823	450,251	74.1	157,572	25.9	50,712	22,022	43.4	28,690	56.6
2007new ^a	619,499	460,294	74.3	159,205	25.7	50,840	22,103	43.5	28,737	56.5
2008	631,489	463,450	73.4	168,039	26.6	54,164	24,915	46.0	29,249	54.0
2009	631,645	459,648	72.8	171,997	27.2	57,805	27,105	46.9	30,700	53.1
2010 ^{b,c}	632,652	458,492	72.5	174,160	27.5	63,439	30,155	47.5	33,284	52.5
2011 ^c	626,820	450,523	71.9	176,297	28.1	62,639	29,712	47.4	32,927	52.6
2012	627,243	443,697	70.7	183,546	29.3	62,851	29,864	47.5	32,987	52.5

TABLE 1-3a

Citizenship of graduate students and postdoctoral appointees in science, engineering, and health: 1980–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
2013	633,010	436,296	68.9	196,714	31.1	61,942	29,546	47.7	32,396	52.3
2014old ^d	650,738	429,133	65.9	221,605	34.1	62,379	29,630	47.5	32,749	52.5
2014new ^d	666,586	439,309	65.9	227,277	34.1	63,593	30,095	47.3	33,498	52.7
2015	685,397	441,956	64.5	243,441	35.5	63,861	28,726	45.0	35,135	55.0
2016	684,825	436,139	63.7	248,686	36.3	64,712	29,810	46.1	34,902	53.9
2017old ^e	684,096	446,676	65.3	237,420	34.7	64,888	30,197	46.5	34,691	53.5
2017new ^e	649,112	416,481	64.2	232,631	35.8	64,733	30,110	46.5	34,623	53.5
2018	668,307	438,581	65.6	229,726	34.4	64,783	29,622	45.7	35,161	54.3
2019	690,117	456,504	66.1	233,613	33.9	66,247	29,452	44.5	36,795	55.5
2020	697,813	487,051	69.8	210,762	30.2	65,681	29,890	45.5	35,791	54.5
2021	760,156	515,597	67.8	244,559	32.2	63,328	29,755	47.0	33,573	53.0
2022	798,534	500,299	62.7	298,235	37.3	62,750	27,289	43.5	35,461	56.5
2023	818,095	495,808	60.6	322,287	39.4	65,850	27,701	42.1	38,149	57.9
Master's students										
2017new ^e	378,587	251,896	66.5	126,691	33.5	na	na	na	na	na
2018	391,211	271,290	69.3	119,921	30.7	na	na	na	na	na
2019	408,228	287,370	70.4	120,858	29.6	na	na	na	na	na
2020	414,478	314,305	75.8	100,173	24.2	na	na	na	na	na
2021	466,613	337,655	72.4	128,958	27.6	na	na	na	na	na
2022	501,311	322,005	64.2	179,306	35.8	na	na	na	na	na
2023	510,866	313,609	61.4	197,257	38.6	na	na	na	na	na
Doctoral students										
2017new ^e	270,525	164,585	60.8	105,940	39.2	na	na	na	na	na
2018	277,096	167,291	60.4	109,805	39.6	na	na	na	na	na
2019	281,889	169,134	60.0	112,755	40.0	na	na	na	na	na
2020	283,335	172,746	61.0	110,589	39.0	na	na	na	na	na
2021	293,543	177,942	60.6	115,601	39.4	na	na	na	na	na
2022	297,223	178,294	60.0	118,929	40.0	na	na	na	na	na
2023	307,229	182,199	59.3	125,030	40.7	na	na	na	na	na

na = not applicable; master's and doctoral students were not reported separately until 2017.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2010, the postdoctoral appointee (postdoc) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and nonfaculty researcher (NFR) data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^e As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-3b

Citizenship of graduate students and postdoctoral appointees in science: 1980–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1980	251,265	220,903	87.9	30,362	12.1	13,042	8,307	63.7	4,735	36.3
1981	252,404	219,762	87.1	32,642	12.9	13,731	8,504	61.9	5,227	38.1
1982	255,146	215,397	84.4	39,749	15.6	13,698	8,393	61.3	5,305	38.7
1983	255,820	213,114	83.3	42,706	16.7	14,562	9,063	62.2	5,499	37.8
1984	256,903	212,717	82.8	44,186	17.2	14,979	9,248	61.7	5,731	38.3
1985	261,973	214,014	81.7	47,959	18.3	15,576	9,300	59.7	6,276	40.3
1986	266,077	214,097	80.5	51,980	19.5	16,512	9,660	58.5	6,852	41.5
1987	269,256	213,882	79.4	55,374	20.6	17,369	9,835	56.6	7,534	43.4
1988	272,309	213,945	78.6	58,364	21.4	18,024	9,856	54.7	8,168	45.3
1989	278,577	217,211	78.0	61,366	22.0	18,978	10,028	52.8	8,950	47.2
1990	289,383	224,792	77.7	64,591	22.3	19,853	10,056	50.7	9,797	49.3
1991	299,057	231,803	77.5	67,254	22.5	20,595	10,152	49.3	10,443	50.7
1992	312,478	244,514	78.2	67,964	21.8	21,514	10,417	48.4	11,097	51.6
1993	318,851	252,480	79.2	66,371	20.8	22,219	10,792	48.6	11,427	51.4
1994	318,118	253,008	79.5	65,110	20.5	23,181	11,451	49.4	11,730	50.6
1995	315,265	252,245	80.0	63,020	20.0	23,512	11,824	50.3	11,688	49.7
1996	311,957	248,907	79.8	63,050	20.2	23,892	11,880	49.7	12,012	50.3
1997	306,482	244,026	79.6	62,456	20.4	24,293	11,746	48.4	12,547	51.6
1998	304,818	240,630	78.9	64,188	21.1	25,023	12,016	48.0	13,007	52.0
1999	309,491	241,066	77.9	68,425	22.1	25,784	11,707	45.4	14,077	54.6
2000	309,424	234,000	75.6	75,424	24.4	26,911	11,558	42.9	15,353	57.1
2001	319,736	237,718	74.3	82,018	25.7	27,044	11,108	41.1	15,936	58.9
2002	335,166	247,842	73.9	87,324	26.1	28,371	12,407	43.7	15,964	56.3
2003	347,268	259,871	74.8	87,397	25.2	29,856	12,409	41.6	17,447	58.4
2004	352,307	265,643	75.4	86,664	24.6	30,116	12,672	42.1	17,444	57.9
2005	357,710	271,962	76.0	85,748	24.0	30,290	12,665	41.8	17,625	58.2
2006	363,246	275,905	76.0	87,341	24.0	30,245	12,573	41.6	17,672	58.4
2007old ^a	372,120	282,785	76.0	89,335	24.0	30,986	13,312	43.0	17,674	57.0
2007new ^a	384,523	293,792	76.4	90,731	23.6	31,281	13,513	43.2	17,768	56.8
2008	391,419	295,530	75.5	95,889	24.5	32,741	14,375	43.9	18,366	56.1
2009	401,008	303,700	75.7	97,308	24.3	34,388	15,800	45.9	18,588	54.1
2010 ^{b,c}	407,291	308,108	75.6	99,183	24.4	37,351	17,793	47.6	19,558	52.4
2011 ^c	414,440	312,846	75.5	101,594	24.5	37,335	17,706	47.4	19,629	52.6
2012	413,033	308,042	74.6	104,991	25.4	36,738	17,476	47.6	19,262	52.4

TABLE 1-3b

Citizenship of graduate students and postdoctoral appointees in science: 1980–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
2013	417,251	305,563	73.2	111,688	26.8	36,289	17,551	48.4	18,738	51.6
2014old ^d	425,148	300,110	70.6	125,038	29.4	36,184	17,229	47.6	18,955	52.4
2014new ^d	437,395	308,499	70.5	128,896	29.5	37,316	17,661	47.3	19,655	52.7
2015	448,654	309,182	68.9	139,472	31.1	37,639	17,072	45.4	20,567	54.6
2016	452,046	306,710	67.8	145,336	32.2	37,941	17,615	46.4	20,326	53.6
2017old ^e	450,343	310,973	69.1	139,370	30.9	37,816	17,803	47.1	20,013	52.9
2017new ^e	415,568	281,057	67.6	134,511	32.4	38,241	17,993	47.1	20,248	52.9
2018	432,255	297,277	68.8	134,978	31.2	37,564	17,447	46.4	20,117	53.6
2019	453,691	312,368	68.9	141,323	31.1	38,503	17,344	45.0	21,159	55.0
2020	464,646	334,959	72.1	129,687	27.9	38,741	18,276	47.2	20,465	52.8
2021	509,784	353,449	69.3	156,335	30.7	37,189	17,860	48.0	19,329	52.0
2022	538,166	340,964	63.4	197,202	36.6	36,673	16,542	45.1	20,131	54.9
2023	561,489	342,026	60.9	219,463	39.1	37,982	16,635	43.8	21,347	56.2
Master's students										
2017new ^e	229,169	156,831	68.4	72,338	31.6	na	na	na	na	na
2018	241,327	171,049	70.9	70,278	29.1	na	na	na	na	na
2019	259,795	185,378	71.4	74,417	28.6	na	na	na	na	na
2020	267,904	204,677	76.4	63,227	23.6	na	na	na	na	na
2021	305,796	219,843	71.9	85,953	28.1	na	na	na	na	na
2022	331,983	208,232	62.7	123,751	37.3	na	na	na	na	na
2023	348,520	206,723	59.3	141,797	40.7	na	na	na	na	na
Doctoral students										
2017new ^e	186,399	124,226	66.6	62,173	33.4	na	na	na	na	na
2018	190,928	126,228	66.1	64,700	33.9	na	na	na	na	na
2019	193,896	126,990	65.5	66,906	34.5	na	na	na	na	na
2020	196,742	130,282	66.2	66,460	33.8	na	na	na	na	na
2021	203,988	133,606	65.5	70,382	34.5	na	na	na	na	na
2022	206,183	132,732	64.4	73,451	35.6	na	na	na	na	na
2023	212,969	135,303	63.5	77,666	36.5	na	na	na	na	na

na = not applicable; master's and doctoral students were not reported separately until 2017.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^e As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-3c

Citizenship of graduate students and postdoctoral appointees in engineering: 1980–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1980	74,335	56,438	75.9	17,897	24.1	981	303	30.9	678	69.1
1981	79,585	59,898	75.3	19,687	24.7	1,040	332	31.9	708	68.1
1982	83,720	58,656	70.1	25,064	29.9	980	323	33.0	657	67.0
1983	91,146	63,649	69.8	27,497	30.2	1,108	414	37.4	694	62.6
1984	92,739	64,832	69.9	27,907	30.1	1,203	439	36.5	764	63.5
1985	96,018	67,187	70.0	28,831	30.0	1,356	443	32.7	913	67.3
1986	101,905	69,949	68.6	31,956	31.4	1,405	460	32.7	945	67.3
1987	103,983	70,594	67.9	33,389	32.1	1,446	497	34.4	949	65.6
1988	102,854	67,617	65.7	35,237	34.3	1,690	588	34.8	1,102	65.2
1989	104,065	67,365	64.7	36,700	35.3	1,928	657	34.1	1,271	65.9
1990	107,658	69,454	64.5	38,204	35.5	1,950	613	31.4	1,337	68.6
1991	113,535	72,181	63.6	41,354	36.4	2,262	655	29.0	1,607	71.0
1992	118,039	76,569	64.9	41,470	35.1	2,369	767	32.4	1,602	67.6
1993	116,872	77,577	66.4	39,295	33.6	2,446	843	34.5	1,603	65.5
1994	113,024	76,018	67.3	37,006	32.7	2,606	1,018	39.1	1,588	60.9
1995	107,201	71,717	66.9	35,484	33.1	2,648	999	37.7	1,649	62.3
1996	103,224	68,168	66.0	35,056	34.0	2,677	1,050	39.2	1,627	60.8
1997	101,148	64,642	63.9	36,506	36.1	2,971	1,089	36.7	1,882	63.3
1998	100,038	62,249	62.2	37,789	37.8	2,853	950	33.3	1,903	66.7
1999	101,691	60,188	59.2	41,503	40.8	3,196	1,018	31.9	2,178	68.1
2000	104,112	56,651	54.4	47,461	45.6	3,313	1,069	32.3	2,244	67.7
2001	109,493	56,890	52.0	52,603	48.0	3,152	965	30.6	2,187	69.4
2002	119,668	61,277	51.2	58,391	48.8	3,566	1,117	31.3	2,449	68.7
2003	127,377	67,310	52.8	60,067	47.2	3,810	1,133	29.7	2,677	70.3
2004	123,566	66,379	53.7	57,187	46.3	3,949	1,297	32.8	2,652	67.2
2005	120,565	66,551	55.2	54,014	44.8	4,166	1,413	33.9	2,753	66.1
2006	123,041	67,698	55.0	55,343	45.0	4,642	1,538	33.1	3,104	66.9
2007old ^a	130,255	70,357	54.0	59,898	46.0	4,908	1,591	32.4	3,317	67.6
2007new ^a	131,676	71,299	54.1	60,377	45.9	4,942	1,594	32.3	3,348	67.7
2008	137,856	74,251	53.9	63,605	46.1	5,462	1,899	34.8	3,563	65.2
2009	144,677	78,642	54.4	66,035	45.6	6,416	2,375	37.0	4,041	63.0
2010 ^{b,c}	149,241	82,295	55.1	66,946	44.9	6,969	2,637	37.8	4,332	62.2
2011 ^c	146,501	79,314	54.1	67,187	45.9	6,786	2,634	38.8	4,152	61.2
2012	148,385	77,301	52.1	71,084	47.9	7,103	2,738	38.5	4,365	61.5

TABLE 1-3c

Citizenship of graduate students and postdoctoral appointees in engineering: 1980–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
2013	153,049	75,662	49.4	77,387	50.6	7,106	2,706	38.1	4,400	61.9
2014old ^d	162,013	73,268	45.2	88,745	54.8	7,292	2,789	38.2	4,503	61.8
2014new ^d	164,488	74,013	45.0	90,475	55.0	7,307	2,792	38.2	4,515	61.8
2015	169,354	73,452	43.4	95,902	56.6	7,656	2,521	32.9	5,135	67.1
2016	168,443	73,039	43.4	95,404	56.6	7,796	2,590	33.2	5,206	66.8
2017old ^e	166,819	76,182	45.7	90,637	54.3	7,929	2,662	33.6	5,267	66.4
2017new ^e	165,581	75,160	45.4	90,421	54.6	7,839	2,650	33.8	5,189	66.2
2018	163,301	76,770	47.0	86,531	53.0	7,914	2,656	33.6	5,258	66.4
2019	164,004	79,982	48.8	84,022	51.2	8,266	2,689	32.5	5,577	67.5
2020	157,729	84,403	53.5	73,326	46.5	8,462	2,793	33.0	5,669	67.0
2021	168,050	88,665	52.8	79,385	47.2	8,340	2,907	34.9	5,433	65.1
2022	176,000	85,274	48.5	90,726	51.5	8,335	2,839	34.1	5,496	65.9
2023	175,559	83,469	47.5	92,090	52.5	9,051	2,916	32.2	6,135	67.8
Master's students										
2017new ^e	96,756	46,470	48.0	50,286	52.0	na	na	na	na	na
2018	93,064	47,813	51.4	45,251	48.6	na	na	na	na	na
2019	91,939	49,873	54.2	42,066	45.8	na	na	na	na	na
2020	86,450	53,643	62.1	32,807	37.9	na	na	na	na	na
2021	95,126	57,033	60.0	38,093	40.0	na	na	na	na	na
2022	103,020	53,603	52.0	49,417	48.0	na	na	na	na	na
2023	100,567	51,528	51.2	49,039	48.8	na	na	na	na	na
Doctoral students										
2017new ^e	68,825	28,690	41.7	40,135	58.3	na	na	na	na	na
2018	70,237	28,957	41.2	41,280	58.8	na	na	na	na	na
2019	72,065	30,109	41.8	41,956	58.2	na	na	na	na	na
2020	71,279	30,760	43.2	40,519	56.8	na	na	na	na	na
2021	72,924	31,632	43.4	41,292	56.6	na	na	na	na	na
2022	72,980	31,671	43.4	41,309	56.6	na	na	na	na	na
2023	74,992	31,941	42.6	43,051	57.4	na	na	na	na	na

na = not applicable; master's and doctoral students were not reported separately until 2017.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^e As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-3d

Citizenship of graduate students and postdoctoral appointees in health: 1980–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1980	41,478	39,435	95.1	2,043	4.9	4,376	3,283	75.0	1,093	25.0
1981	43,141	40,995	95.0	2,146	5.0	4,863	3,504	72.1	1,359	27.9
1982	43,425	40,405	93.0	3,020	7.0	4,685	3,413	72.8	1,272	27.2
1983	43,466	40,422	93.0	3,044	7.0	5,042	3,716	73.7	1,326	26.3
1984	45,028	42,099	93.5	2,929	6.5	5,353	3,861	72.1	1,492	27.9
1985	46,030	42,880	93.2	3,150	6.8	5,455	3,785	69.4	1,670	30.6
1986	47,538	44,188	93.0	3,350	7.0	5,804	3,921	67.6	1,883	32.4
1987	48,258	44,874	93.0	3,384	7.0	6,066	3,801	62.7	2,265	37.3
1988	49,360	45,717	92.6	3,643	7.4	6,409	3,976	62.0	2,433	38.0
1989	51,836	47,927	92.5	3,909	7.5	7,026	4,178	59.5	2,848	40.5
1990	55,072	50,801	92.2	4,271	7.8	7,762	4,446	57.3	3,316	42.7
1991	58,620	54,041	92.2	4,579	7.8	8,008	4,328	54.0	3,680	46.0
1992	63,005	58,522	92.9	4,483	7.1	8,864	4,616	52.1	4,248	47.9
1993	68,581	63,928	93.2	4,653	6.8	9,657	5,092	52.7	4,565	47.3
1994	73,257	68,826	94.0	4,431	6.0	10,590	5,517	52.1	5,073	47.9
1995	77,174	72,793	94.3	4,381	5.7	9,766	5,319	54.5	4,447	45.5
1996	78,898	74,020	93.8	4,878	6.2	10,538	5,482	52.0	5,056	48.0
1997	79,578	74,659	93.8	4,919	6.2	11,217	6,081	54.2	5,136	45.8
1998	80,771	75,681	93.7	5,090	6.3	12,210	6,744	55.2	5,466	44.8
1999	82,074	76,548	93.3	5,526	6.7	11,820	6,159	52.1	5,661	47.9
2000	79,775	74,243	93.1	5,532	6.9	12,891	6,825	52.9	6,066	47.1
2001	80,378	74,129	92.2	6,249	7.8	13,115	6,306	48.1	6,809	51.9
2002	85,570	78,297	91.5	7,273	8.5	13,097	6,139	46.9	6,958	53.1
2003	92,476	84,924	91.8	7,552	8.2	13,062	6,121	46.9	6,941	53.1
2004	98,590	91,196	92.5	7,394	7.5	13,175	6,187	47.0	6,988	53.0
2005	103,951	96,217	92.6	7,734	7.4	14,099	7,429	52.7	6,670	47.3
2006	111,356	103,022	92.5	8,334	7.5	14,456	7,036	48.7	7,420	51.3
2007old ^a	105,448	97,109	92.1	8,339	7.9	14,818	7,119	48.0	7,699	52.0
2007new ^a	103,300	95,203	92.2	8,097	7.8	14,617	6,996	47.9	7,621	52.1
2008	102,214	93,669	91.6	8,545	8.4	15,961	8,641	54.1	7,320	45.9
2009	85,960	77,306	89.9	8,654	10.1	17,001	8,930	52.5	8,071	47.5
2010 ^{b,c}	76,120	68,089	89.4	8,031	10.6	19,119	9,725	50.9	9,394	49.1
2011 ^c	65,879	58,363	88.6	7,516	11.4	18,518	9,372	50.6	9,146	49.4
2012	65,825	58,354	88.7	7,471	11.3	19,010	9,650	50.8	9,360	49.2

TABLE 1-3d

Citizenship of graduate students and postdoctoral appointees in health: 1980–2023

(Number and percent)

Year	Graduate students					Postdoctoral appointees				
	Total	U.S. citizens and permanent residents		Temporary visa holders		Total	U.S. citizens and permanent residents		Temporary visa holders	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
2013	62,710	55,071	87.8	7,639	12.2	18,547	9,289	50.1	9,258	49.9
2014old ^d	63,577	55,755	87.7	7,822	12.3	18,903	9,612	50.8	9,291	49.2
2014new ^d	64,703	56,797	87.8	7,906	12.2	18,970	9,642	50.8	9,328	49.2
2015	67,389	59,322	88.0	8,067	12.0	18,566	9,133	49.2	9,433	50.8
2016	64,336	56,390	87.6	7,946	12.4	18,975	9,605	50.6	9,370	49.4
2017old ^e	66,934	59,521	88.9	7,413	11.1	19,143	9,732	50.8	9,411	49.2
2017new ^e	67,963	60,264	88.7	7,699	11.3	18,653	9,467	50.8	9,186	49.2
2018	72,751	64,534	88.7	8,217	11.3	19,305	9,519	49.3	9,786	50.7
2019	72,422	64,154	88.6	8,268	11.4	19,478	9,419	48.4	10,059	51.6
2020	75,438	67,689	89.7	7,749	10.3	18,478	8,821	47.7	9,657	52.3
2021	82,322	73,483	89.3	8,839	10.7	17,799	8,988	50.5	8,811	49.5
2022	84,368	74,061	87.8	10,307	12.2	17,742	7,908	44.6	9,834	55.4
2023	81,047	70,313	86.8	10,734	13.2	18,817	8,150	43.3	10,667	56.7
Master's students										
2017new ^e	52,662	48,595	92.3	4,067	7.7	na	na	na	na	na
2018	56,820	52,428	92.3	4,392	7.7	na	na	na	na	na
2019	56,494	52,119	92.3	4,375	7.7	na	na	na	na	na
2020	60,124	55,985	93.1	4,139	6.9	na	na	na	na	na
2021	65,691	60,779	92.5	4,912	7.5	na	na	na	na	na
2022	66,308	60,170	90.7	6,138	9.3	na	na	na	na	na
2023	61,779	55,358	89.6	6,421	10.4	na	na	na	na	na
Doctoral students										
2017new ^e	15,301	11,669	76.3	3,632	23.7	na	na	na	na	na
2018	15,931	12,106	76.0	3,825	24.0	na	na	na	na	na
2019	15,928	12,035	75.6	3,893	24.4	na	na	na	na	na
2020	15,314	11,704	76.4	3,610	23.6	na	na	na	na	na
2021	16,631	12,704	76.4	3,927	23.6	na	na	na	na	na
2022	18,060	13,891	76.9	4,169	23.1	na	na	na	na	na
2023	19,268	14,955	77.6	4,313	22.4	na	na	na	na	na

na = not applicable; master's and doctoral students were not reported separately until 2017.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.

^c Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^e As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-4a

Ethnicity and race of U.S. citizen and permanent resident graduate students in science, engineering, and health: 2000–23

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race			
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race		Number	Percent
				Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
2000	364,894	21,327	5.8	2,021	0.6	28,568	7.8	25,928	7.1	1,622	0.4	261,112	71.6	520	0.1	23,796	6.5
2001	368,737	22,329	6.1	2,136	0.6	30,528	8.3	27,071	7.3	1,417	0.4	260,371	70.6	551	0.1	24,334	6.6
2002	387,416	24,282	6.3	2,239	0.6	33,625	8.7	28,715	7.4	1,293	0.3	270,025	69.7	467	0.1	26,770	6.9
2003	412,105	26,684	6.5	2,399	0.6	36,756	8.9	31,242	7.6	1,399	0.3	283,241	68.7	493	0.1	29,891	7.3
2004	423,218	28,031	6.6	2,354	0.6	36,084	8.5	32,496	7.7	1,651	0.4	288,574	68.2	569	0.1	33,459	7.9
2005	434,730	29,309	6.7	2,485	0.6	36,432	8.4	33,547	7.7	1,332	0.3	292,276	67.2	629	0.1	38,720	8.9
2006	446,625	30,510	6.8	2,689	0.6	36,635	8.2	34,866	7.8	1,228	0.3	299,275	67.0	608	0.1	40,814	9.1
2007old ^a	450,251	31,110	6.9	2,777	0.6	36,924	8.2	34,934	7.8	1,472	0.3	298,917	66.4	662	0.1	43,455	9.7
2007new ^a	460,294	31,700	6.9	2,862	0.6	37,297	8.1	35,923	7.8	1,485	0.3	306,001	66.5	667	0.1	44,359	9.6
2008	463,450	31,648	6.8	3,286	0.7	36,579	7.9	37,047	8.0	1,426	0.3	306,989	66.2	1,556	0.3	44,919	9.7
2009	459,648	32,336	7.0	3,042	0.7	37,310	8.1	37,349	8.1	1,350	0.3	302,677	65.8	2,645	0.6	42,939	9.3
2010	458,492	33,375	7.3	2,884	0.6	37,228	8.1	38,199	8.3	1,354	0.3	299,993	65.4	5,816	1.3	39,643	8.6
2011	450,523	35,028	7.8	2,741	0.6	37,516	8.3	38,902	8.6	1,318	0.3	293,640	65.2	6,899	1.5	34,479	7.7
2012	443,697	35,858	8.1	2,507	0.6	37,119	8.4	38,340	8.6	1,176	0.3	287,786	64.9	8,714	2.0	32,197	7.3
2013	436,296	37,283	8.5	2,517	0.6	37,137	8.5	37,197	8.5	1,037	0.2	281,354	64.5	9,160	2.1	30,611	7.0
2014old ^b	429,133	37,746	8.8	2,320	0.5	37,453	8.7	36,113	8.4	997	0.2	275,389	64.2	10,440	2.4	28,675	6.7
2014new ^b	439,309	39,881	9.1	2,385	0.5	38,264	8.7	36,280	8.3	1,022	0.2	281,285	64.0	10,649	2.4	29,543	6.7
2015	441,956	43,177	9.8	2,306	0.5	39,810	9.0	37,245	8.4	1,048	0.2	278,364	63.0	11,521	2.6	28,485	6.4
2016	436,139	45,171	10.4	2,147	0.5	40,500	9.3	36,634	8.4	991	0.2	272,317	62.4	12,023	2.8	26,356	6.0
2017old ^c	446,676	48,491	10.9	2,065	0.5	43,385	9.7	37,853	8.5	825	0.2	274,128	61.4	14,376	3.2	25,553	5.7
2017new ^c	416,481	44,621	10.7	1,850	0.4	42,045	10.1	32,749	7.9	703	0.2	257,302	61.8	13,539	3.3	23,672	5.7
2018	438,581	49,084	11.2	1,932	0.4	45,307	10.3	35,943	8.2	730	0.2	265,735	60.6	14,864	3.4	24,986	5.7
2019	456,504	54,467	11.9	2,077	0.5	48,844	10.7	38,048	8.3	744	0.2	272,545	59.7	15,613	3.4	24,166	5.3
2020	487,051	62,679	12.9	2,042	0.4	53,094	10.9	41,916	8.6	778	0.2	284,055	58.3	17,579	3.6	24,908	5.1
2021	515,597	69,174	13.4	2,105	0.4	60,203	11.7	45,302	8.8	792	0.2	294,198	57.1	19,471	3.8	24,352	4.7
2022	500,299	69,621	13.9	2,082	0.4	61,426	12.3	44,016	8.8	738	0.1	279,657	55.9	19,331	3.9	23,428	4.7
2023	495,808	70,428	14.2	1,984	0.4	62,549	12.6	46,276	9.3	754	0.2	269,477	54.4	20,004	4.0	24,336	4.9
Master's students																	
2017new ^c	251,896	29,622	11.8	1,136	0.5	26,093	10.4	23,266	9.2	468	0.2	148,031	58.8	8,119	3.2	15,161	6.0
2018	271,290	32,923	12.1	1,219	0.4	28,557	10.5	25,878	9.5	497	0.2	156,010	57.5	9,120	3.4	17,086	6.3
2019	287,370	36,777	12.8	1,327	0.5	31,301	10.9	27,598	9.6	542	0.2	163,836	57.0	9,593	3.3	16,396	5.7
2020	314,305	43,750	13.9	1,284	0.4	35,075	11.2	30,842	9.8	578	0.2	175,090	55.7	11,069	3.5	16,617	5.3

TABLE 1-4a

Ethnicity and race of U.S. citizen and permanent resident graduate students in science, engineering, and health: 2000–23

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race			
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race		Number	Percent
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2021	337,655	48,681	14.4	1,356	0.4	40,607	12.0	33,129	9.8	597	0.2	184,608	54.7	12,301	3.6	16,376	4.8
2022	322,005	48,303	15.0	1,331	0.4	40,873	12.7	31,398	9.8	541	0.2	172,212	53.5	12,002	3.7	15,345	4.8
2023	313,609	48,099	15.3	1,211	0.4	40,930	13.1	31,764	10.1	544	0.2	163,247	52.1	12,120	3.9	15,694	5.0
Doctoral students																	
2017new ^c	164,585	14,999	9.1	714	0.4	15,952	9.7	9,483	5.8	235	0.1	109,271	66.4	5,420	3.3	8,511	5.2
2018	167,291	16,161	9.7	713	0.4	16,750	10.0	10,065	6.0	233	0.1	109,725	65.6	5,744	3.4	7,900	4.7
2019	169,134	17,690	10.5	750	0.4	17,543	10.4	10,450	6.2	202	0.1	108,709	64.3	6,020	3.6	7,770	4.6
2020	172,746	18,929	11.0	758	0.4	18,019	10.4	11,074	6.4	200	0.1	108,965	63.1	6,510	3.8	8,291	4.8
2021	177,942	20,493	11.5	749	0.4	19,596	11.0	12,173	6.8	195	0.1	109,590	61.6	7,170	4.0	7,976	4.5
2022	178,294	21,318	12.0	751	0.4	20,553	11.5	12,618	7.1	197	0.1	107,445	60.3	7,329	4.1	8,083	4.5
2023	182,199	22,329	12.3	773	0.4	21,619	11.9	14,512	8.0	210	0.1	106,230	58.3	7,884	4.3	8,642	4.7

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^c As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. Ethnicity and race data are available only for U.S. citizens and permanent residents. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-4b

Ethnicity and race of U.S. citizen and permanent resident graduate students in science: 2000–23

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race			
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race		Number	Percent
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2000	234,000	14,185	6.1	1,394	0.6	16,839	7.2	17,857	7.6	945	0.4	166,486	71.1	399	0.2	15,895	6.8
2001	237,718	14,791	6.2	1,456	0.6	17,698	7.4	18,540	7.8	870	0.4	167,559	70.5	429	0.2	16,375	6.9
2002	247,842	16,173	6.5	1,490	0.6	19,160	7.7	19,594	7.9	770	0.3	172,576	69.6	330	0.1	17,749	7.2
2003	259,871	17,262	6.6	1,575	0.6	20,280	7.8	20,962	8.1	819	0.3	179,205	69.0	357	0.1	19,411	7.5
2004	265,643	18,048	6.8	1,575	0.6	20,007	7.5	21,225	8.0	926	0.3	181,615	68.4	437	0.2	21,810	8.2
2005	271,962	19,297	7.1	1,685	0.6	19,952	7.3	21,778	8.0	892	0.3	182,908	67.3	454	0.2	24,996	9.2
2006	275,905	19,759	7.2	1,822	0.7	20,182	7.3	22,092	8.0	818	0.3	184,700	66.9	448	0.2	26,084	9.5
2007old ^a	282,785	20,515	7.3	1,882	0.7	20,818	7.4	22,881	8.1	946	0.3	187,292	66.2	457	0.2	27,994	9.9
2007new ^a	293,792	21,176	7.2	1,972	0.7	21,261	7.2	23,862	8.1	998	0.3	194,875	66.3	464	0.2	29,184	9.9
2008	295,530	21,382	7.2	2,272	0.8	20,808	7.0	24,694	8.4	965	0.3	195,037	66.0	1,147	0.4	29,225	9.9
2009	303,700	22,047	7.3	2,205	0.7	21,976	7.2	25,801	8.5	976	0.3	200,047	65.9	1,950	0.6	28,698	9.4
2010	308,108	22,969	7.5	2,171	0.7	21,915	7.1	26,914	8.7	914	0.3	202,386	65.7	3,987	1.3	26,852	8.7
2011	312,846	24,889	8.0	2,075	0.7	23,000	7.4	28,129	9.0	842	0.3	205,437	65.7	4,865	1.6	23,609	7.5
2012	308,042	25,371	8.2	1,910	0.6	22,878	7.4	27,414	8.9	781	0.3	201,326	65.4	6,071	2.0	22,291	7.2
2013	305,563	26,585	8.7	1,939	0.6	23,108	7.6	27,199	8.9	752	0.2	198,105	64.8	6,575	2.2	21,300	7.0
2014old ^b	300,110	26,941	9.0	1,763	0.6	23,335	7.8	26,083	8.7	758	0.3	193,589	64.5	7,512	2.5	20,129	6.7
2014new ^b	308,499	28,605	9.3	1,826	0.6	24,039	7.8	26,768	8.7	784	0.3	198,185	64.2	7,697	2.5	20,595	6.7
2015	309,182	30,891	10.0	1,742	0.6	25,044	8.1	27,019	8.7	789	0.3	195,761	63.3	8,285	2.7	19,651	6.4
2016	306,710	32,616	10.6	1,615	0.5	25,772	8.4	26,890	8.8	747	0.2	191,941	62.6	8,690	2.8	18,439	6.0
2017old ^c	310,973	34,199	11.0	1,559	0.5	27,541	8.9	27,550	8.9	621	0.2	191,298	61.5	10,280	3.3	17,925	5.8
2017new ^c	281,057	30,383	10.8	1,347	0.5	26,028	9.3	22,557	8.0	487	0.2	174,801	62.2	9,434	3.4	16,020	5.7
2018	297,277	33,894	11.4	1,403	0.5	28,425	9.6	24,844	8.4	531	0.2	180,735	60.8	10,346	3.5	17,099	5.8
2019	312,368	38,193	12.2	1,526	0.5	31,482	10.1	26,450	8.5	542	0.2	186,405	59.7	10,902	3.5	16,868	5.4
2020	334,959	43,705	13.0	1,468	0.4	34,812	10.4	29,051	8.7	553	0.2	195,406	58.3	12,244	3.7	17,720	5.3
2021	353,449	48,343	13.7	1,443	0.4	39,413	11.2	31,021	8.8	561	0.2	201,768	57.1	13,468	3.8	17,432	4.9
2022	340,964	48,508	14.2	1,335	0.4	40,603	11.9	29,714	8.7	537	0.2	190,960	56.0	13,393	3.9	15,914	4.7
2023	342,026	49,494	14.5	1,412	0.4	41,873	12.2	32,482	9.5	572	0.2	185,527	54.2	13,966	4.1	16,700	4.9
Master's students																	
2017new ^c	156,831	18,728	11.9	777	0.5	15,084	9.6	15,639	10.0	305	0.2	91,511	58.4	5,202	3.3	9,585	6.1
2018	171,049	21,203	12.4	823	0.5	16,933	9.9	17,560	10.3	350	0.2	97,081	56.8	5,915	3.5	11,184	6.5
2019	185,378	24,330	13.1	902	0.5	19,529	10.5	18,996	10.2	382	0.2	103,762	56.0	6,339	3.4	11,138	6.0
2020	204,677	28,849	14.1	851	0.4	22,270	10.9	21,126	10.3	403	0.2	112,534	55.0	7,293	3.6	11,351	5.5

TABLE 1-4b

Ethnicity and race of U.S. citizen and permanent resident graduate students in science: 2000–23

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race	
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race		Number	Percent
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2021	219,843	32,387	14.7	845	0.4	25,795	11.7	22,257	10.1	410	0.2	118,785	54.0	8,022	3.6	11,342	5.2
2022	208,232	31,959	15.3	752	0.4	26,267	12.6	20,810	10.0	382	0.2	110,258	52.9	7,876	3.8	9,928	4.8
2023	206,723	32,310	15.6	808	0.4	26,885	13.0	22,048	10.7	413	0.2	105,997	51.3	7,998	3.9	10,264	5.0
Doctoral students																	
2017 ^{new} ^c	124,226	11,655	9.4	570	0.5	10,944	8.8	6,918	5.6	182	0.1	83,290	67.0	4,232	3.4	6,435	5.2
2018	126,228	12,691	10.1	580	0.5	11,492	9.1	7,284	5.8	181	0.1	83,654	66.3	4,431	3.5	5,915	4.7
2019	126,990	13,863	10.9	624	0.5	11,953	9.4	7,454	5.9	160	0.1	82,643	65.1	4,563	3.6	5,730	4.5
2020	130,282	14,856	11.4	617	0.5	12,542	9.6	7,925	6.1	150	0.1	82,872	63.6	4,951	3.8	6,369	4.9
2021	133,606	15,956	11.9	598	0.4	13,618	10.2	8,764	6.6	151	0.1	82,983	62.1	5,446	4.1	6,090	4.6
2022	132,732	16,549	12.5	583	0.4	14,336	10.8	8,904	6.7	155	0.1	80,702	60.8	5,517	4.2	5,986	4.5
2023	135,303	17,184	12.7	604	0.4	14,988	11.1	10,434	7.7	159	0.1	79,530	58.8	5,968	4.4	6,436	4.8

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^c As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. Ethnicity and race data are available only for U.S. citizens and permanent residents.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-4c

Ethnicity and race of U.S. citizen and permanent resident graduate students in engineering: 2000–23

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race			
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race	
				Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2000	56,651	3,018	5.3	208	0.4	6,909	12.2	2,977	5.3	305	0.5	39,083	69.0	40	0.1	4,111	7.3
2001	56,890	3,183	5.6	227	0.4	7,769	13.7	2,915	5.1	157	0.3	38,459	67.6	35	0.1	4,145	7.3
2002	61,277	3,461	5.6	244	0.4	9,130	14.9	3,074	5.0	169	0.3	40,559	66.2	54	0.1	4,586	7.5
2003	67,310	3,979	5.9	304	0.5	10,466	15.5	3,212	4.8	221	0.3	43,469	64.6	66	0.1	5,593	8.3
2004	66,379	4,164	6.3	273	0.4	9,563	14.4	3,399	5.1	149	0.2	43,235	65.1	56	0.1	5,540	8.3
2005	66,551	4,090	6.1	273	0.4	9,595	14.4	3,470	5.2	135	0.2	42,868	64.4	74	0.1	6,046	9.1
2006	67,698	4,381	6.5	290	0.4	9,050	13.4	3,572	5.3	129	0.2	43,293	64.0	53	0.1	6,930	10.2
2007old ^a	70,357	4,517	6.4	286	0.4	9,316	13.2	3,684	5.2	199	0.3	44,751	63.6	86	0.1	7,518	10.7
2007new ^a	71,299	4,563	6.4	290	0.4	9,436	13.2	3,775	5.3	202	0.3	45,329	63.6	87	0.1	7,617	10.7
2008	74,251	4,716	6.4	346	0.5	9,548	12.9	3,986	5.4	156	0.2	47,586	64.1	172	0.2	7,741	10.4
2009	78,642	5,218	6.6	344	0.4	9,778	12.4	4,172	5.3	149	0.2	50,396	64.1	350	0.4	8,235	10.5
2010	82,295	5,640	6.9	329	0.4	10,270	12.5	4,180	5.1	174	0.2	52,870	64.2	1,002	1.2	7,830	9.5
2011	79,314	5,919	7.5	317	0.4	10,147	12.8	4,068	5.1	166	0.2	50,659	63.9	1,238	1.6	6,800	8.6
2012	77,301	6,035	7.8	278	0.4	9,822	12.7	3,924	5.1	139	0.2	49,457	64.0	1,507	1.9	6,139	7.9
2013	75,662	6,234	8.2	259	0.3	9,809	13.0	3,712	4.9	130	0.2	48,413	64.0	1,440	1.9	5,665	7.5
2014old ^b	73,268	6,205	8.5	285	0.4	9,646	13.2	3,631	5.0	118	0.2	46,706	63.7	1,624	2.2	5,053	6.9
2014new ^b	74,013	6,527	8.8	286	0.4	9,706	13.1	3,714	5.0	118	0.2	46,918	63.4	1,638	2.2	5,106	6.9
2015	73,452	6,916	9.4	270	0.4	9,718	13.2	3,769	5.1	146	0.2	45,888	62.5	1,745	2.4	5,000	6.8
2016	73,039	6,962	9.5	245	0.3	9,902	13.6	3,710	5.1	115	0.2	45,622	62.5	1,824	2.5	4,659	6.4
2017old ^c	76,182	7,664	10.1	222	0.3	10,531	13.8	3,941	5.2	84	0.1	47,289	62.1	2,304	3.0	4,147	5.4
2017new ^c	75,160	7,537	10.0	208	0.3	10,483	13.9	3,842	5.1	86	0.1	46,637	62.1	2,265	3.0	4,102	5.5
2018	76,770	7,939	10.3	211	0.3	10,863	14.2	4,035	5.3	75	0.1	47,447	61.8	2,460	3.2	3,740	4.9
2019	79,982	8,643	10.8	242	0.3	11,390	14.2	4,220	5.3	95	0.1	48,892	61.1	2,773	3.5	3,727	4.7
2020	84,403	9,644	11.4	239	0.3	12,020	14.2	4,583	5.4	101	0.1	50,847	60.2	3,143	3.7	3,826	4.5
2021	88,665	10,821	12.2	286	0.3	13,412	15.1	4,847	5.5	98	0.1	52,168	58.8	3,478	3.9	3,555	4.0
2022	85,274	10,629	12.5	339	0.4	13,268	15.6	4,752	5.6	80	0.1	48,988	57.4	3,430	4.0	3,788	4.4
2023	83,469	10,604	12.7	221	0.3	13,441	16.1	4,730	5.7	80	0.1	46,915	56.2	3,628	4.3	3,850	4.6
Master's students																	
2017new ^c	46,470	5,130	11.0	134	0.3	6,416	13.8	2,505	5.4	56	0.1	28,281	60.9	1,422	3.1	2,526	5.4
2018	47,813	5,436	11.4	140	0.3	6,758	14.1	2,618	5.5	45	0.1	28,993	60.6	1,519	3.2	2,304	4.8
2019	49,873	5,846	11.7	168	0.3	7,009	14.1	2,708	5.4	69	0.1	30,121	60.4	1,672	3.4	2,280	4.6
2020	53,643	6,704	12.5	160	0.3	7,628	14.2	2,952	5.5	71	0.1	31,783	59.2	1,949	3.6	2,396	4.5

TABLE 1-4c

Ethnicity and race of U.S. citizen and permanent resident graduate students in engineering: 2000–23

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race			
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race	
				Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2021	57,033	7,612	13.3	205	0.4	8,685	15.2	3,141	5.5	70	0.1	32,987	57.8	2,155	3.8	2,178	3.8
2022	53,603	7,379	13.8	253	0.5	8,383	15.6	2,983	5.6	54	0.1	30,174	56.3	2,060	3.8	2,317	4.3
2023	51,528	7,204	14.0	138	0.3	8,305	16.1	2,894	5.6	50	0.1	28,366	55.0	2,191	4.3	2,380	4.6
Doctoral students																	
2017new ^c	28,690	2,407	8.4	74	0.3	4,067	14.2	1,337	4.7	30	0.1	18,356	64.0	843	2.9	1,576	5.5
2018	28,957	2,503	8.6	71	0.2	4,105	14.2	1,417	4.9	30	0.1	18,454	63.7	941	3.2	1,436	5.0
2019	30,109	2,797	9.3	74	0.2	4,381	14.6	1,512	5.0	26	0.1	18,771	62.3	1,101	3.7	1,447	4.8
2020	30,760	2,940	9.6	79	0.3	4,392	14.3	1,631	5.3	30	0.1	19,064	62.0	1,194	3.9	1,430	4.6
2021	31,632	3,209	10.1	81	0.3	4,727	14.9	1,706	5.4	28	0.1	19,181	60.6	1,323	4.2	1,377	4.4
2022	31,671	3,250	10.3	86	0.3	4,885	15.4	1,769	5.6	26	0.1	18,814	59.4	1,370	4.3	1,471	4.6
2023	31,941	3,400	10.6	83	0.3	5,136	16.1	1,836	5.7	30	0.1	18,549	58.1	1,437	4.5	1,470	4.6

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^c As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. Ethnicity and race data are available only for U.S. citizens and permanent residents.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-4d

Ethnicity and race of U.S. citizen and permanent resident graduate students in health: 2000–23

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race			
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race		Number	Percent
				Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
2000	74,243	4,124	5.6	419	0.6	4,820	6.5	5,094	6.9	372	0.5	55,543	74.8	81	0.1	3,790	5.1
2001	74,129	4,355	5.9	453	0.6	5,061	6.8	5,616	7.6	390	0.5	54,353	73.3	87	0.1	3,814	5.1
2002	78,297	4,648	5.9	505	0.6	5,335	6.8	6,047	7.7	354	0.5	56,890	72.7	83	0.1	4,435	5.7
2003	84,924	5,443	6.4	520	0.6	6,010	7.1	7,068	8.3	359	0.4	60,567	71.3	70	0.1	4,887	5.8
2004	91,196	5,819	6.4	506	0.6	6,514	7.1	7,872	8.6	576	0.6	63,724	69.9	76	0.1	6,109	6.7
2005	96,217	5,922	6.2	527	0.5	6,885	7.2	8,299	8.6	305	0.3	66,500	69.1	101	0.1	7,678	8.0
2006	103,022	6,370	6.2	577	0.6	7,403	7.2	9,202	8.9	281	0.3	71,282	69.2	107	0.1	7,800	7.6
2007old ^a	97,109	6,078	6.3	609	0.6	6,790	7.0	8,369	8.6	327	0.3	66,874	68.9	119	0.1	7,943	8.2
2007new ^a	95,203	5,961	6.3	600	0.6	6,600	6.9	8,286	8.7	285	0.3	65,797	69.1	116	0.1	7,558	7.9
2008	93,669	5,550	5.9	668	0.7	6,223	6.6	8,367	8.9	305	0.3	64,366	68.7	237	0.3	7,953	8.5
2009	77,306	5,071	6.6	493	0.6	5,556	7.2	7,376	9.5	225	0.3	52,234	67.6	345	0.4	6,006	7.8
2010	68,089	4,766	7.0	384	0.6	5,043	7.4	7,105	10.4	266	0.4	44,737	65.7	827	1.2	4,961	7.3
2011	58,363	4,220	7.2	349	0.6	4,369	7.5	6,705	11.5	310	0.5	37,544	64.3	796	1.4	4,070	7.0
2012	58,354	4,452	7.6	319	0.5	4,419	7.6	7,002	12.0	256	0.4	37,003	63.4	1,136	1.9	3,767	6.5
2013	55,071	4,464	8.1	319	0.6	4,220	7.7	6,286	11.4	155	0.3	34,836	63.3	1,145	2.1	3,646	6.6
2014old ^b	55,755	4,600	8.3	272	0.5	4,472	8.0	6,399	11.5	121	0.2	35,094	62.9	1,304	2.3	3,493	6.3
2014new ^b	56,797	4,749	8.4	273	0.5	4,519	8.0	5,798	10.2	120	0.2	36,182	63.7	1,314	2.3	3,842	6.8
2015	59,322	5,370	9.1	294	0.5	5,048	8.5	6,457	10.9	113	0.2	36,715	61.9	1,491	2.5	3,834	6.5
2016	56,390	5,593	9.9	287	0.5	4,826	8.6	6,034	10.7	129	0.2	34,754	61.6	1,509	2.7	3,258	5.8
2017old ^c	59,521	6,628	11.1	284	0.5	5,313	8.9	6,362	10.7	120	0.2	35,541	59.7	1,792	3.0	3,481	5.8
2017new ^c	60,264	6,701	11.1	295	0.5	5,534	9.2	6,350	10.5	130	0.2	35,864	59.5	1,840	3.1	3,550	5.9
2018	64,534	7,251	11.2	318	0.5	6,019	9.3	7,064	10.9	124	0.2	37,553	58.2	2,058	3.2	4,147	6.4
2019	64,154	7,631	11.9	309	0.5	5,972	9.3	7,378	11.5	107	0.2	37,248	58.1	1,938	3.0	3,571	5.6
2020	67,689	9,330	13.8	335	0.5	6,262	9.3	8,282	12.2	124	0.2	37,802	55.8	2,192	3.2	3,362	5.0
2021	73,483	10,010	13.6	376	0.5	7,378	10.0	9,434	12.8	133	0.2	40,262	54.8	2,525	3.4	3,365	4.6
2022	74,061	10,484	14.2	408	0.6	7,555	10.2	9,550	12.9	121	0.2	39,709	53.6	2,508	3.4	3,726	5.0
2023	70,313	10,330	14.7	351	0.5	7,235	10.3	9,064	12.9	102	0.1	37,035	52.7	2,410	3.4	3,786	5.4
Master's students																	
2017new ^c	48,595	5,764	11.9	225	0.5	4,593	9.5	5,122	10.5	107	0.2	28,239	58.1	1,495	3.1	3,050	6.3
2018	52,428	6,284	12.0	256	0.5	4,866	9.3	5,700	10.9	102	0.2	29,936	57.1	1,686	3.2	3,598	6.9
2019	52,119	6,601	12.7	257	0.5	4,763	9.1	5,894	11.3	91	0.2	29,953	57.5	1,582	3.0	2,978	5.7
2020	55,985	8,197	14.6	273	0.5	5,177	9.2	6,764	12.1	104	0.2	30,773	55.0	1,827	3.3	2,870	5.1

TABLE 1-4d

Ethnicity and race of U.S. citizen and permanent resident graduate students in health: 2000–23

(Number and percent)

Year	Total	U.S. citizens and permanent residents															
		Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race	
		Number	Percent	American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race		Number	Percent
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2021	60,779	8,682	14.3	306	0.5	6,127	10.1	7,731	12.7	117	0.2	32,836	54.0	2,124	3.5	2,856	4.7
2022	60,170	8,965	14.9	326	0.5	6,223	10.3	7,605	12.6	105	0.2	31,780	52.8	2,066	3.4	3,100	5.2
2023	55,358	8,585	15.5	265	0.5	5,740	10.4	6,822	12.3	81	0.1	28,884	52.2	1,931	3.5	3,050	5.5
Doctoral students																	
2017new ^c	11,669	937	8.0	70	0.6	941	8.1	1,228	10.5	23	0.2	7,625	65.3	345	3.0	500	4.3
2018	12,106	967	8.0	62	0.5	1,153	9.5	1,364	11.3	22	0.2	7,617	62.9	372	3.1	549	4.5
2019	12,035	1,030	8.6	52	0.4	1,209	10.0	1,484	12.3	16	0.1	7,295	60.6	356	3.0	593	4.9
2020	11,704	1,133	9.7	62	0.5	1,085	9.3	1,518	13.0	20	0.2	7,029	60.1	365	3.1	492	4.2
2021	12,704	1,328	10.5	70	0.6	1,251	9.8	1,703	13.4	16	0.1	7,426	58.5	401	3.2	509	4.0
2022	13,891	1,519	10.9	82	0.6	1,332	9.6	1,945	14.0	16	0.1	7,929	57.1	442	3.2	626	4.5
2023	14,955	1,745	11.7	86	0.6	1,495	10.0	2,242	15.0	21	0.1	8,151	54.5	479	3.2	736	4.9

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^c As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. Ethnicity and race data are available only for U.S. citizens and permanent residents. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-5a

Enrollment intensity of graduate students in science, engineering, and health, by degree program: 1975–2023

(Number and percent)

Year	All science, engineering, and health graduate students					All science graduate students					All engineering graduate students					All health graduate students				
	Total	Full time		Part time		Total	Full time		Part time		Total	Full time		Part time		Total	Full time		Part time	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
1975	328,510	219,648	66.9	108,862	33.1	234,649	164,437	70.1	70,212	29.9	68,332	37,823	55.4	30,509	44.6	25,529	17,388	68.1	8,141	31.9
1976	333,716	223,412	66.9	110,304	33.1	238,675	167,867	70.3	70,808	29.7	66,723	36,948	55.4	29,775	44.6	28,318	18,597	65.7	9,721	34.3
1977	345,374	226,738	65.6	118,636	34.4	242,932	169,184	69.6	73,748	30.4	68,757	37,227	54.1	31,530	45.9	33,685	20,327	60.3	13,358	39.7
1978 ^a	339,912	223,030	65.6	116,882	34.4	236,465	164,151	69.4	72,314	30.6	67,787	37,586	55.4	30,201	44.6	35,660	21,293	59.7	14,367	40.3
1979	357,578	231,760	64.8	125,818	35.2	247,235	168,959	68.3	78,276	31.7	71,808	40,041	55.8	31,767	44.2	38,535	22,760	59.1	15,775	40.9
1980	367,078	238,416	64.9	128,662	35.1	251,265	171,767	68.4	79,498	31.6	74,335	42,650	57.4	31,685	42.6	41,478	23,999	57.9	17,479	42.1
1981	375,130	242,049	64.5	133,081	35.5	252,404	172,200	68.2	80,204	31.8	79,585	45,752	57.5	33,833	42.5	43,141	24,097	55.9	19,044	44.1
1982	382,291	244,757	64.0	137,534	36.0	255,146	172,090	67.4	83,056	32.6	83,720	49,784	59.5	33,936	40.5	43,425	22,883	52.7	20,542	47.3
1983	390,432	252,017	64.5	138,415	35.5	255,820	175,472	68.6	80,348	31.4	91,146	53,932	59.2	37,214	40.8	43,466	22,613	52.0	20,853	48.0
1984	394,670	253,922	64.3	140,748	35.7	256,903	175,766	68.4	81,137	31.6	92,739	55,191	59.5	37,548	40.5	45,028	22,965	51.0	22,063	49.0
1985	404,021	257,287	63.7	146,734	36.3	261,973	178,020	68.0	83,953	32.0	96,018	55,918	58.2	40,100	41.8	46,030	23,349	50.7	22,681	49.3
1986	415,520	266,168	64.1	149,352	35.9	266,077	182,532	68.6	83,545	31.4	101,905	60,197	59.1	41,708	40.9	47,538	23,439	49.3	24,099	50.7
1987	421,497	271,056	64.3	150,441	35.7	269,256	185,143	68.8	84,113	31.2	103,983	61,962	59.6	42,021	40.4	48,258	23,951	49.6	24,307	50.4
1988	424,523	275,127	64.8	149,396	35.2	272,309	187,525	68.9	84,784	31.1	102,854	63,032	61.3	39,822	38.7	49,360	24,570	49.8	24,790	50.2
1989	434,478	282,648	65.1	151,830	34.9	278,577	192,424	69.1	86,153	30.9	104,065	64,396	61.9	39,669	38.1	51,836	25,828	49.8	26,008	50.2
1990	452,113	292,782	64.8	159,331	35.2	289,383	199,313	68.9	90,070	31.1	107,658	66,010	61.3	41,648	38.7	55,072	27,459	49.9	27,613	50.1
1991	471,212	307,010	65.2	164,202	34.8	299,057	206,036	68.9	93,021	31.1	113,535	71,034	62.6	42,501	37.4	58,620	29,940	51.1	28,680	48.9
1992	493,522	322,555	65.4	170,967	34.6	312,478	215,965	69.1	96,513	30.9	118,039	74,443	63.1	43,596	36.9	63,005	32,147	51.0	30,858	49.0
1993	504,304	329,644	65.4	174,660	34.6	318,851	220,097	69.0	98,754	31.0	116,872	73,808	63.2	43,064	36.8	68,581	35,739	52.1	32,842	47.9
1994	504,399	332,088	65.8	172,311	34.2	318,118	221,409	69.6	96,709	30.4	113,024	71,570	63.3	41,454	36.7	73,257	39,109	53.4	34,148	46.6
1995	499,640	329,283	65.9	170,357	34.1	315,265	219,389	69.6	95,876	30.4	107,201	67,782	63.2	39,419	36.8	77,174	42,112	54.6	35,062	45.4
1996	494,079	328,536	66.5	165,543	33.5	311,957	218,180	69.9	93,777	30.1	103,224	65,859	63.8	37,365	36.2	78,898	44,497	56.4	34,401	43.6
1997	487,208	327,289	67.2	159,919	32.8	306,482	214,981	70.1	91,501	29.9	101,148	65,688	64.9	35,460	35.1	79,578	46,620	58.6	32,958	41.4
1998	485,627	327,389	67.4	158,238	32.6	304,818	213,508	70.0	91,310	30.0	100,038	65,435	65.4	34,603	34.6	80,771	48,446	60.0	32,325	40.0
1999	493,256	334,423	67.8	158,833	32.2	309,491	215,870	69.8	93,621	30.2	101,691	68,023	66.9	33,668	33.1	82,074	50,530	61.6	31,544	38.4
2000	493,311	341,283	69.2	152,028	30.8	309,424	219,079	70.8	90,345	29.2	104,112	72,276	69.4	31,836	30.6	79,775	49,928	62.6	29,847	37.4
2001	509,607	354,522	69.6	155,085	30.4	319,736	226,573	70.9	93,163	29.1	109,493	77,448	70.7	32,045	29.3	80,378	50,501	62.8	29,877	37.2
2002	540,404	378,991	70.1	161,413	29.9	335,166	240,020	71.6	95,146	28.4	119,668	85,452	71.4	34,216	28.6	85,570	53,519	62.5	32,051	37.5
2003	567,121	397,420	70.1	169,701	29.9	347,268	248,812	71.6	98,456	28.4	127,377	90,216	70.8	37,161	29.2	92,476	58,392	63.1	34,084	36.9
2004	574,463	402,573	70.1	171,890	29.9	352,307	253,574	72.0	98,733	28.0	123,566	86,955	70.4	36,611	29.6	98,590	62,044	62.9	36,546	37.1
2005	582,226	406,620	69.8	175,606	30.2	357,710	257,283	71.9	100,427	28.1	120,565	84,459	70.1	36,106	29.9	103,951	64,878	62.4	39,073	37.6
2006	597,643	419,015	70.1	178,628	29.9	363,246	261,984	72.1	101,262	27.9	123,041	87,818	71.4	35,223	28.6	111,356	69,213	62.2	42,143	37.8
2007 ^{old} ^b	607,823	430,860	70.9	176,963	29.1	372,120	269,821	72.5	102,299	27.5	130,255	93,155	71.5	37,100	28.5	105,448	67,884	64.4	37,564	35.6
2007 ^{new} ^b	619,499	437,365	70.6	182,134	29.4	384,523	277,229	72.1	107,294	27.9	131,676	94,313	71.6	37,363	28.4	103,300	65,823	63.7	37,477	36.3

TABLE 1-5a

Enrollment intensity of graduate students in science, engineering, and health, by degree program: 1975–2023

(Number and percent)

Year	All science, engineering, and health graduate students					All science graduate students					All engineering graduate students					All health graduate students				
	Total	Full time		Part time		Total	Full time		Part time		Total	Full time		Part time		Total	Full time		Part time	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
2008	631,489	449,613	71.2	181,876	28.8	391,419	285,305	72.9	106,114	27.1	137,856	98,255	71.3	39,601	28.7	102,214	66,053	64.6	36,161	35.4
2009	631,645	456,115	72.2	175,530	27.8	401,008	293,561	73.2	107,447	26.8	144,677	104,937	72.5	39,740	27.5	85,960	57,617	67.0	28,343	33.0
2010	632,652	461,185	72.9	171,467	27.1	407,291	299,315	73.5	107,976	26.5	149,241	109,792	73.6	39,449	26.4	76,120	52,078	68.4	24,042	31.6
2011	626,820	457,292	73.0	169,528	27.0	414,440	303,015	73.1	111,425	26.9	146,501	108,153	73.8	38,348	26.2	65,879	46,124	70.0	19,755	30.0
2012	627,243	459,498	73.3	167,745	26.7	413,033	304,795	73.8	108,238	26.2	148,385	109,589	73.9	38,796	26.1	65,825	45,114	68.5	20,711	31.5
2013	633,010	468,953	74.1	164,057	25.9	417,251	309,756	74.2	107,495	25.8	153,049	114,752	75.0	38,297	25.0	62,710	44,445	70.9	18,265	29.1
2014old ^c	650,738	484,880	74.5	165,858	25.5	425,148	317,881	74.8	107,267	25.2	162,013	122,642	75.7	39,371	24.3	63,577	44,357	69.8	19,220	30.2
2014new ^c	666,586	492,170	73.8	174,416	26.2	437,395	322,714	73.8	114,681	26.2	164,488	124,382	75.6	40,106	24.4	64,703	45,074	69.7	19,629	30.3
2015	685,397	506,262	73.9	179,135	26.1	448,654	331,293	73.8	117,361	26.2	169,354	128,112	75.6	41,242	24.4	67,389	46,857	69.5	20,532	30.5
2016	684,825	508,773	74.3	176,052	25.7	452,046	334,770	74.1	117,276	25.9	168,443	128,203	76.1	40,240	23.9	64,336	45,800	71.2	18,536	28.8
2017old ^d	684,096	498,619	72.9	185,477	27.1	450,343	327,596	72.7	122,747	27.3	166,819	124,363	74.5	42,456	25.5	66,934	46,660	69.7	20,274	30.3
2017new ^d	649,112	480,788	74.1	168,324	25.9	415,568	310,809	74.8	104,759	25.2	165,581	123,107	74.3	42,474	25.7	67,963	46,872	69.0	21,091	31.0
2018	668,307	491,449	73.5	176,858	26.5	432,255	321,063	74.3	111,192	25.7	163,301	120,521	73.8	42,780	26.2	72,751	49,865	68.5	22,886	31.5
2019	690,117	502,442	72.8	187,675	27.2	453,691	331,673	73.1	122,018	26.9	164,004	121,117	73.9	42,887	26.1	72,422	49,652	68.6	22,770	31.4
2020	697,813	491,515	70.4	206,298	29.6	464,646	330,541	71.1	134,105	28.9	157,729	111,240	70.5	46,489	29.5	75,438	49,734	65.9	25,704	34.1
2021	760,156	543,823	71.5	216,333	28.5	509,784	366,207	71.8	143,577	28.2	168,050	122,853	73.1	45,197	26.9	82,322	54,763	66.5	27,559	33.5
2022	798,534	579,301	72.5	219,233	27.5	538,166	392,192	72.9	145,974	27.1	176,000	130,447	74.1	45,553	25.9	84,368	56,662	67.2	27,706	32.8
2023	818,095	598,588	73.2	219,507	26.8	561,489	411,971	73.4	149,518	26.6	175,559	131,607	75.0	43,952	25.0	81,047	55,010	67.9	26,037	32.1
Master's students																				
2017new ^d	378,587	245,010	64.7	133,577	35.3	229,169	145,689	63.6	83,480	36.4	96,756	63,532	65.7	33,224	34.3	52,662	35,789	68.0	16,873	32.0
2018	391,211	248,552	63.5	142,659	36.5	241,327	151,059	62.6	90,268	37.4	93,064	59,228	63.6	33,836	36.4	56,820	38,265	67.3	18,555	32.7
2019	408,228	254,532	62.4	153,696	37.6	259,795	158,704	61.1	101,091	38.9	91,939	57,723	62.8	34,216	37.2	56,494	38,105	67.4	18,389	32.6
2020	414,478	243,859	58.8	170,619	41.2	267,904	155,502	58.0	112,402	42.0	86,450	49,179	56.9	37,271	43.1	60,124	39,178	65.2	20,946	34.8
2021	466,613	286,954	61.5	179,659	38.5	305,796	184,719	60.4	121,077	39.6	95,126	58,790	61.8	36,336	38.2	65,691	43,445	66.1	22,246	33.9
2022	501,311	319,618	63.8	181,693	36.2	331,983	208,749	62.9	123,234	37.1	103,020	66,427	64.5	36,593	35.5	66,308	44,442	67.0	21,866	33.0
2023	510,866	329,971	64.6	180,895	35.4	348,520	222,976	64.0	125,544	36.0	100,567	65,160	64.8	35,407	35.2	61,779	41,835	67.7	19,944	32.3
Doctoral students																				
2017new ^d	270,525	235,778	87.2	34,747	12.8	186,399	165,120	88.6	21,279	11.4	68,825	59,575	86.6	9,250	13.4	15,301	11,083	72.4	4,218	27.6
2018	277,096	242,897	87.7	34,199	12.3	190,928	170,004	89.0	20,924	11.0	70,237	61,293	87.3	8,944	12.7	15,931	11,600	72.8	4,331	27.2
2019	281,889	247,910	87.9	33,979	12.1	193,896	172,969	89.2	20,927	10.8	72,065	63,394	88.0	8,671	12.0	15,928	11,547	72.5	4,381	27.5
2020	283,335	247,656	87.4	35,679	12.6	196,742	175,039	89.0	21,703	11.0	71,279	62,061	87.1	9,218	12.9	15,314	10,556	68.9	4,758	31.1
2021	293,543	256,869	87.5	36,674	12.5	203,988	181,488	89.0	22,500	11.0	72,924	64,063	87.8	8,861	12.2	16,631	11,318	68.1	5,313	31.9
2022	297,223	259,683	87.4	37,540	12.6	206,183	183,443	89.0	22,740	11.0	72,980	64,020	87.7	8,960	12.3	18,060	12,220	67.7	5,840	32.3

TABLE 1-5a

Enrollment intensity of graduate students in science, engineering, and health, by degree program: 1975–2023

(Number and percent)

Year	All science, engineering, and health graduate students					All science graduate students					All engineering graduate students					All health graduate students				
	Total	Full time		Part time		Total	Full time		Part time		Total	Full time		Part time		Total	Full time		Part time	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent	Number	Percent
2023	307,229	268,617	87.4	38,612	12.6	212,969	188,995	88.7	23,974	11.3	74,992	66,447	88.6	8,545	11.4	19,268	13,175	68.4	6,093	31.6

^a Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^b In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^c In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^d As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. Ethnicity and race data are available only for U.S. citizens and permanent residents. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-5b

First-time status among full-time graduate students in science, engineering, and health, by degree level: 1975–2023

(Number and percent)

Year	All full-time graduate students			Full-time master's students			Full-time doctoral students		
	Total	First time		Total	First time		Total	First time	
		Number	Percent		Number	Percent		Number	Percent
1975	219,648	76,686	34.9	na	na	na	na	na	na
1976	223,412	90,811	40.6	na	na	na	na	na	na
1977	226,738	93,116	41.1	na	na	na	na	na	na
1978 ^a	223,030	70,578	31.6	na	na	na	na	na	na
1979	231,760	76,788	33.1	na	na	na	na	na	na
1980	238,416	81,259	34.1	na	na	na	na	na	na
1981	242,049	80,003	33.1	na	na	na	na	na	na
1982	244,757	80,257	32.8	na	na	na	na	na	na
1983	252,017	81,606	32.4	na	na	na	na	na	na
1984	253,922	80,186	31.6	na	na	na	na	na	na
1985	257,287	80,678	31.4	na	na	na	na	na	na
1986	266,168	82,548	31.0	na	na	na	na	na	na
1987	271,056	80,843	29.8	na	na	na	na	na	na
1988	275,127	80,580	29.3	na	na	na	na	na	na
1989	282,648	84,532	29.9	na	na	na	na	na	na
1990	292,782	87,401	29.9	na	na	na	na	na	na
1991	307,010	93,147	30.3	na	na	na	na	na	na
1992	322,555	95,802	29.7	na	na	na	na	na	na
1993	329,644	92,748	28.1	na	na	na	na	na	na
1994	332,088	92,171	27.8	na	na	na	na	na	na
1995	329,283	89,482	27.2	na	na	na	na	na	na
1996	328,536	88,984	27.1	na	na	na	na	na	na
1997	327,289	89,177	27.2	na	na	na	na	na	na
1998	327,389	90,828	27.7	na	na	na	na	na	na
1999	334,423	92,214	27.6	na	na	na	na	na	na
2000	341,283	94,340	27.6	na	na	na	na	na	na
2001	354,522	98,112	27.7	na	na	na	na	na	na
2002	378,991	104,184	27.5	na	na	na	na	na	na
2003	397,420	107,715	27.1	na	na	na	na	na	na
2004	402,573	106,544	26.5	na	na	na	na	na	na
2005	406,620	110,219	27.1	na	na	na	na	na	na
2006	419,015	116,482	27.8	na	na	na	na	na	na
2007 ^{old} ^b	430,860	120,236	27.9	na	na	na	na	na	na
2007 ^{new} ^b	437,365	122,449	28.0	na	na	na	na	na	na

TABLE 1-5b

First-time status among full-time graduate students in science, engineering, and health, by degree level: 1975–2023

(Number and percent)

Year	All full-time graduate students			Full-time master's students			Full-time doctoral students		
	Total	First time		Total	First time		Total	First time	
		Number	Percent		Number	Percent		Number	Percent
2008	449,613	130,635	29.1	na	na	na	na	na	na
2009	456,115	134,756	29.5	na	na	na	na	na	na
2010	461,185	136,487	29.6	na	na	na	na	na	na
2011	457,292	136,610	29.9	na	na	na	na	na	na
2012	459,498	137,767	30.0	na	na	na	na	na	na
2013	468,953	143,326	30.6	na	na	na	na	na	na
2014old ^c	484,880	150,653	31.1	na	na	na	na	na	na
2014new ^c	492,170	154,219	31.3	na	na	na	na	na	na
2015	506,262	161,640	31.9	na	na	na	na	na	na
2016	508,773	161,824	31.8	na	na	na	na	na	na
2017old ^d	498,619	162,805	32.7	na	na	na	na	na	na
2017new ^d	480,788	156,157	32.5	245,010	110,980	45.3	235,778	45,177	19.2
2018	491,449	159,724	32.5	248,552	114,214	46.0	242,897	45,510	18.7
2019	502,442	163,032	32.4	254,532	116,507	45.8	247,910	46,525	18.8
2020	491,515	143,269	29.1	243,859	102,096	41.9	247,656	41,173	16.6
2021	543,823	193,936	35.7	286,954	147,266	51.3	256,869	46,670	18.2
2022	579,301	194,733	33.6	319,618	147,317	46.1	259,683	47,416	18.3
2023	598,588	203,798	34.0	329,971	153,545	46.5	268,617	50,253	18.7

na = not applicable; master's and doctoral students were not reported separately until 2017.

^a Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.^b In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.^c In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.^d As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.**Note(s):**Percentages may not add to total because of rounding. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the ["Technical Notes."](#)**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-6

Primary source of support for full-time graduate students in science, engineering, and health: 1975–2023

(Number and percent)

Year	Total	Federal		Institutional		Nonfederal domestic		Foreign		Personal resources	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1975	219,648	47,055	21.4	76,170	34.7	11,189	5.1	5,374	2.4	79,860	36.4
1976	223,412	49,036	21.9	81,839	36.6	11,830	5.3	6,279	2.8	74,428	33.3
1977	226,738	50,809	22.4	82,994	36.6	11,883	5.2	6,879	3.0	74,173	32.7
1978 ^a	223,030	51,984	23.3	81,676	36.6	19,450	8.7	na	na	69,920	31.4
1979	231,760	52,682	22.7	84,879	36.6	12,577	5.4	7,773	3.4	73,849	31.9
1980	238,416	52,959	22.2	88,691	37.2	13,068	5.5	8,241	3.5	75,457	31.6
1981	242,049	50,896	21.0	92,089	38.0	13,735	5.7	8,807	3.6	76,522	31.6
1982	244,757	47,403	19.4	95,271	38.9	15,128	6.2	9,059	3.7	77,896	31.8
1983	252,017	47,752	18.9	98,149	38.9	15,904	6.3	8,979	3.6	81,233	32.2
1984	253,922	47,784	18.8	102,175	40.2	16,638	6.6	8,175	3.2	79,150	31.2
1985	257,287	49,051	19.1	104,058	40.4	18,778	7.3	7,770	3.0	77,630	30.2
1986	266,168	51,361	19.3	109,199	41.0	19,056	7.2	7,672	2.9	78,880	29.6
1987	271,056	53,538	19.8	112,263	41.4	18,275	6.7	7,200	2.7	79,780	29.4
1988	275,127	55,489	20.2	114,740	41.7	18,737	6.8	7,001	2.5	79,160	28.8
1989	282,648	57,433	20.3	119,114	42.1	19,140	6.8	6,710	2.4	80,251	28.4
1990	292,782	59,258	20.2	123,005	42.0	19,604	6.7	6,531	2.2	84,384	28.8
1991	307,010	63,000	20.5	125,329	40.8	20,455	6.7	6,643	2.2	91,583	29.8
1992	322,555	65,607	20.3	127,846	39.6	21,343	6.6	6,460	2.0	101,299	31.4
1993	329,644	67,673	20.5	128,950	39.1	21,264	6.5	5,481	1.7	106,276	32.2
1994	332,088	68,550	20.6	129,218	38.9	21,567	6.5	5,718	1.7	107,035	32.2
1995	329,283	67,294	20.4	129,320	39.3	20,435	6.2	5,547	1.7	106,687	32.4
1996	328,536	65,240	19.9	128,379	39.1	20,193	6.1	5,249	1.6	109,475	33.3
1997	327,289	64,522	19.7	128,927	39.4	20,251	6.2	4,848	1.5	108,741	33.2
1998	327,389	63,759	19.5	128,995	39.4	22,157	6.8	4,254	1.3	108,224	33.1
1999	334,423	65,796	19.7	133,182	39.8	22,099	6.6	3,930	1.2	109,416	32.7
2000	341,283	67,588	19.8	133,415	39.1	24,000	7.0	3,848	1.1	112,432	32.9
2001	354,522	68,843	19.4	140,787	39.7	24,420	6.9	3,836	1.1	116,636	32.9
2002	378,991	75,538	19.9	147,883	39.0	25,557	6.7	3,359	0.9	126,654	33.4
2003	397,420	81,761	20.6	151,713	38.2	26,118	6.6	3,098	0.8	134,730	33.9
2004	402,573	83,816	20.8	154,514	38.4	24,325	6.0	2,840	0.7	137,078	34.1
2005	406,620	83,723	20.6	156,332	38.4	24,548	6.0	2,614	0.6	139,403	34.3
2006	419,015	83,962	20.0	160,405	38.3	25,384	6.1	2,658	0.6	146,606	35.0
2007 ^{old} ^b	430,860	81,542	18.9	167,836	39.0	24,262	5.6	2,927	0.7	154,293	35.8
2007 ^{new} ^b	437,365	81,859	18.7	171,128	39.1	24,410	5.6	2,939	0.7	157,029	35.9
2008	449,613	78,464	17.5	179,439	39.9	22,238	4.9	3,814	0.8	165,658	36.8

TABLE 1-6

Primary source of support for full-time graduate students in science, engineering, and health: 1975–2023

(Number and percent)

Year	Total	Federal		Institutional		Nonfederal domestic		Foreign		Personal resources	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2009	456,115	81,565	17.9	177,680	39.0	22,910	5.0	4,004	0.9	169,956	37.3
2010	461,185	86,310	18.7	177,946	38.6	22,127	4.8	4,238	0.9	170,564	37.0
2011	457,292	85,220	18.6	179,895	39.3	21,717	4.7	4,653	1.0	165,807	36.3
2012	459,498	80,962	17.6	183,965	40.0	22,443	4.9	5,228	1.1	166,900	36.3
2013	468,953	76,840	16.4	189,440	40.4	20,514	4.4	5,371	1.1	176,788	37.7
2014old ^c	484,880	72,507	15.0	195,446	40.3	19,970	4.1	5,809	1.2	191,148	39.4
2014new ^c	492,170	72,756	14.8	196,810	40.0	20,035	4.1	5,882	1.2	196,687	40.0
2015	506,262	72,393	14.3	201,681	39.8	20,771	4.1	5,739	1.1	205,678	40.6
2016	508,773	71,955	14.1	203,823	40.1	19,793	3.9	5,020	1.0	208,182	40.9
2017old ^d	498,619	69,899	14.0	201,388	40.4	21,211	4.3	5,271	1.1	200,850	40.3
2017new ^d	480,788	69,537	14.5	194,550	40.5	20,833	4.3	5,175	1.1	190,693	39.7
2018	491,449	71,594	14.6	199,298	40.6	19,568	4.0	4,875	1.0	196,114	39.9
2019	502,442	73,605	14.6	205,890	41.0	19,171	3.8	4,699	0.9	199,077	39.6
2020	491,515	76,218	15.5	200,422	40.8	18,380	3.7	3,824	0.8	192,671	39.2
2021	543,823	82,588	15.2	212,869	39.1	19,015	3.5	3,581	0.7	225,770	41.5
2022	579,301	81,773	14.1	229,892	39.7	20,206	3.5	3,131	0.5	244,299	42.2
2023	598,588	82,764	13.8	235,491	39.3	22,852	3.8	3,394	0.6	254,087	42.4
Master's students											
2017new ^d	245,010	12,354	5.0	59,385	24.2	5,884	2.4	1,902	0.8	165,485	67.5
2018	248,552	12,324	5.0	57,999	23.3	4,758	1.9	1,541	0.6	171,930	69.2
2019	254,532	11,491	4.5	60,153	23.6	4,914	1.9	1,517	0.6	176,457	69.3
2020	243,859	12,459	5.1	56,781	23.3	4,498	1.8	1,022	0.4	169,099	69.3
2021	286,954	14,918	5.2	63,468	22.1	4,908	1.7	1,001	0.3	202,659	70.6
2022	319,618	15,823	5.0	74,909	23.4	5,428	1.7	952	0.3	222,506	69.6
2023	329,971	15,602	4.7	76,571	23.2	7,591	2.3	1,088	0.3	229,119	69.4
Doctoral students											
2017new ^d	235,778	57,183	24.3	135,165	57.3	14,949	6.3	3,273	1.4	25,208	10.7
2018	242,897	59,270	24.4	141,299	58.2	14,810	6.1	3,334	1.4	24,184	10.0
2019	247,910	62,114	25.1	145,737	58.8	14,257	5.8	3,182	1.3	22,620	9.1
2020	247,656	63,759	25.7	143,641	58.0	13,882	5.6	2,802	1.1	23,572	9.5
2021	256,869	67,670	26.3	149,401	58.2	14,107	5.5	2,580	1.0	23,111	9.0
2022	259,683	65,950	25.4	154,983	59.7	14,778	5.7	2,179	0.8	21,793	8.4
2023	268,617	67,162	25.0	158,920	59.2	15,261	5.7	2,306	0.9	24,968	9.3

na = not applicable.

^a Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^b In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^c In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^d As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-7

Detailed primary source of federal support for full-time graduate students in science, engineering, and health: 1975–2023

(Number and percent)

Year	Total	DOD		DOE		HHS: NIH		HHS: Other HHS		NASA		NSF		USDA		Other	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1975	47,055	5,061	10.8	NA	NA	12,141	25.8	7,836	16.7	NA	NA	8,790	18.7	NA	NA	13,227	28.1
1976	49,036	4,772	9.7	NA	NA	11,307	23.1	8,341	17.0	NA	NA	8,953	18.3	NA	NA	15,663	31.9
1977	50,809	4,971	9.8	NA	NA	10,861	21.4	9,397	18.5	NA	NA	9,018	17.7	NA	NA	16,562	32.6
1978 ^a	51,984	NA	NA	NA	NA	10,825	20.8	10,060	19.4	NA	NA	9,007	17.3	NA	NA	22,092	42.5
1979	52,682	4,990	9.5	NA	NA	11,648	22.1	10,482	19.9	NA	NA	9,366	17.8	NA	NA	16,196	30.7
1980	52,959	5,251	9.9	NA	NA	11,499	21.7	7,522	14.2	NA	NA	9,348	17.7	NA	NA	19,339	36.5
1981	50,896	5,664	11.1	NA	NA	11,179	22.0	6,429	12.6	NA	NA	9,143	18.0	NA	NA	18,481	36.3
1982	47,403	5,941	12.5	NA	NA	10,814	22.8	4,975	10.5	NA	NA	9,257	19.5	NA	NA	16,416	34.6
1983	47,752	6,969	14.6	NA	NA	10,810	22.6	4,179	8.8	NA	NA	9,524	19.9	NA	NA	16,270	34.1
1984	47,784	7,125	14.9	NA	NA	10,983	23.0	4,124	8.6	NA	NA	9,848	20.6	NA	NA	15,704	32.9
1985	49,051	7,326	14.9	NA	NA	11,112	22.7	4,740	9.7	NA	NA	10,180	20.8	2,171	4.4	13,522	27.6
1986	51,361	7,940	15.5	NA	NA	11,877	23.1	4,500	8.8	NA	NA	10,826	21.1	2,328	4.5	13,890	27.0
1987	53,538	8,795	16.4	NA	NA	12,944	24.2	4,247	7.9	NA	NA	11,247	21.0	2,684	5.0	13,621	25.4
1988	55,489	9,546	17.2	NA	NA	13,715	24.7	4,186	7.5	NA	NA	11,634	21.0	2,591	4.7	13,817	24.9
1989	57,433	9,140	15.9	NA	NA	14,357	25.0	4,335	7.5	NA	NA	11,900	20.7	2,728	4.7	14,973	26.1
1990	59,258	8,868	15.0	NA	NA	14,996	25.3	4,512	7.6	NA	NA	12,025	20.3	2,722	4.6	16,135	27.2
1991	63,000	9,128	14.5	NA	NA	16,018	25.4	4,461	7.1	NA	NA	12,666	20.1	3,075	4.9	17,652	28.0
1992	65,607	9,247	14.1	NA	NA	17,091	26.1	4,321	6.6	NA	NA	13,366	20.4	3,216	4.9	18,366	28.0
1993	67,673	9,750	14.4	NA	NA	18,135	26.8	3,888	5.7	NA	NA	13,530	20.0	3,324	4.9	19,046	28.1
1994	68,550	9,449	13.8	NA	NA	18,292	26.7	4,374	6.4	NA	NA	13,990	20.4	3,422	5.0	19,023	27.8
1995	67,294	9,339	13.9	NA	NA	18,109	26.9	4,666	6.9	NA	NA	13,661	20.3	3,254	4.8	18,265	27.1
1996	65,240	8,802	13.5	NA	NA	17,929	27.5	4,432	6.8	2,309	3.5	13,412	20.6	3,004	4.6	15,352	23.5
1997	64,522	9,021	14.0	NA	NA	18,087	28.0	4,443	6.9	2,586	4.0	13,362	20.7	2,646	4.1	14,377	22.3
1998	63,759	8,259	13.0	NA	NA	18,215	28.6	4,489	7.0	2,646	4.2	13,459	21.1	2,485	3.9	14,206	22.3
1999	65,796	8,026	12.2	2,749	4.2	19,019	28.9	4,423	6.7	2,579	3.9	13,835	21.0	2,634	4.0	12,531	19.0
2000	67,588	8,141	12.0	2,995	4.4	19,472	28.8	4,018	5.9	2,780	4.1	14,599	21.6	2,630	3.9	12,953	19.2
2001	68,843	7,960	11.6	3,116	4.5	19,904	28.9	4,433	6.4	2,819	4.1	15,429	22.4	2,735	4.0	12,447	18.1
2002	75,538	7,977	10.6	3,548	4.7	22,129	29.3	4,830	6.4	3,082	4.1	17,135	22.7	3,100	4.1	13,737	18.2
2003	81,761	9,204	11.3	4,024	4.9	24,309	29.7	4,922	6.0	3,230	4.0	19,308	23.6	3,468	4.2	13,296	16.3
2004	83,816	9,007	10.7	4,135	4.9	26,689	31.8	4,211	5.0	2,916	3.5	19,975	23.8	3,563	4.3	13,320	15.9
2005	83,723	8,993	10.7	4,392	5.2	26,868	32.1	3,912	4.7	2,691	3.2	20,387	24.4	3,351	4.0	13,129	15.7
2006	83,962	8,867	10.6	4,480	5.3	27,587	32.9	3,662	4.4	2,364	2.8	20,339	24.2	3,000	3.6	13,663	16.3
2007 ^{old} ^b	81,542	8,874	10.9	4,281	5.3	26,982	33.1	3,067	3.8	2,314	2.8	19,747	24.2	2,796	3.4	13,481	16.5
2007 ^{new} ^b	81,859	8,885	10.9	4,284	5.2	27,015	33.0	3,086	3.8	2,317	2.8	19,792	24.2	2,810	3.4	13,670	16.7
2008	78,464	8,219	10.5	4,341	5.5	26,003	33.1	2,496	3.2	2,344	3.0	19,882	25.3	2,770	3.5	12,409	15.8

TABLE 1-7

Detailed primary source of federal support for full-time graduate students in science, engineering, and health: 1975–2023

(Number and percent)

Year	Total	DOD		DOE		HHS: NIH		HHS: Other HHS		NASA		NSF		USDA		Other	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2009	81,565	8,683	10.6	4,608	5.6	26,506	32.5	2,200	2.7	2,426	3.0	21,682	26.6	2,706	3.3	12,754	15.6
2010	86,310	9,233	10.7	5,512	6.4	27,615	32.0	2,255	2.6	2,472	2.9	23,226	26.9	3,061	3.5	12,936	15.0
2011	85,220	9,107	10.7	5,738	6.7	25,670	30.1	2,201	2.6	2,394	2.8	24,226	28.4	2,862	3.4	13,022	15.3
2012	80,962	8,748	10.8	5,343	6.6	24,256	30.0	1,921	2.4	2,173	2.7	24,243	29.9	2,664	3.3	11,614	14.3
2013	76,840	8,304	10.8	4,803	6.3	22,372	29.1	1,642	2.1	2,006	2.6	23,307	30.3	2,577	3.4	11,829	15.4
2014old ^c	72,507	7,445	10.3	4,398	6.1	21,153	29.2	1,365	1.9	2,005	2.8	22,791	31.4	2,400	3.3	10,950	15.1
2014new ^c	72,756	7,454	10.2	4,401	6.0	21,191	29.1	1,382	1.9	2,013	2.8	22,899	31.5	2,420	3.3	10,996	15.1
2015	72,393	8,127	11.2	4,309	6.0	20,641	28.5	1,715	2.4	2,036	2.8	22,924	31.7	2,676	3.7	9,965	13.8
2016	71,955	8,291	11.5	4,482	6.2	20,381	28.3	1,635	2.3	2,025	2.8	22,677	31.5	2,535	3.5	9,929	13.8
2017old ^d	69,899	8,365	12.0	4,480	6.4	19,687	28.2	1,727	2.5	1,821	2.6	21,010	30.1	2,444	3.5	10,365	14.8
2017new ^d	69,537	8,323	12.0	4,480	6.4	19,645	28.3	1,719	2.5	1,818	2.6	20,946	30.1	2,415	3.5	10,191	14.7
2018	71,594	7,600	10.6	4,568	6.4	19,903	27.8	2,842	4.0	1,899	2.7	21,711	30.3	2,619	3.7	10,452	14.6
2019	73,605	8,495	11.5	5,119	7.0	21,025	28.6	2,498	3.4	2,057	2.8	21,801	29.6	2,580	3.5	10,030	13.6
2020	76,218	8,635	11.3	5,344	7.0	21,708	28.5	2,761	3.6	2,096	2.8	22,413	29.4	2,689	3.5	10,572	13.9
2021	82,588	9,575	11.6	6,016	7.3	23,088	28.0	2,866	3.5	2,211	2.7	21,743	26.3	3,244	3.9	13,845	16.8
2022	81,773	9,093	11.1	5,870	7.2	23,200	28.4	3,523	4.3	2,174	2.7	21,136	25.8	3,307	4.0	13,470	16.5
2023	82,764	9,171	11.1	5,757	7.0	23,172	28.0	3,314	4.0	2,178	2.6	21,209	25.6	3,332	4.0	14,631	17.7
Master's students																	
2017new ^d	12,354	2,756	22.3	491	4.0	1,014	8.2	310	2.5	286	2.3	2,212	17.9	962	7.8	4,323	35.0
2018	12,324	2,345	19.0	412	3.3	975	7.9	539	4.4	300	2.4	2,160	17.5	1,059	8.6	4,534	36.8
2019	11,491	2,492	21.7	452	3.9	1,046	9.1	471	4.1	276	2.4	2,054	17.9	977	8.5	3,723	32.4
2020	12,459	2,681	21.5	487	3.9	908	7.3	516	4.1	291	2.3	2,058	16.5	1,067	8.6	4,451	35.7
2021	14,918	2,931	19.6	556	3.7	1,024	6.9	653	4.4	291	2.0	2,012	13.5	1,284	8.6	6,167	41.3
2022	15,823	2,801	17.7	554	3.5	1,107	7.0	630	4.0	322	2.0	2,119	13.4	1,315	8.3	6,975	44.1
2023	15,602	2,815	18.0	550	3.5	1,106	7.1	750	4.8	307	2.0	2,072	13.3	1,187	7.6	6,815	43.7
Doctoral students																	
2017new ^d	57,183	5,567	9.7	3,989	7.0	18,631	32.6	1,409	2.5	1,532	2.7	18,734	32.8	1,453	2.5	5,868	10.3
2018	59,270	5,255	8.9	4,156	7.0	18,928	31.9	2,303	3.9	1,599	2.7	19,551	33.0	1,560	2.6	5,918	10.0
2019	62,114	6,003	9.7	4,667	7.5	19,979	32.2	2,027	3.3	1,781	2.9	19,747	31.8	1,603	2.6	6,307	10.2
2020	63,759	5,954	9.3	4,857	7.6	20,800	32.6	2,245	3.5	1,805	2.8	20,355	31.9	1,622	2.5	6,121	9.6
2021	67,670	6,644	9.8	5,460	8.1	22,064	32.6	2,213	3.3	1,920	2.8	19,731	29.2	1,960	2.9	7,678	11.3
2022	65,950	6,292	9.5	5,316	8.1	22,093	33.5	2,893	4.4	1,852	2.8	19,017	28.8	1,992	3.0	6,495	9.8
2023	67,162	6,356	9.5	5,207	7.8	22,066	32.9	2,564	3.8	1,871	2.8	19,137	28.5	2,145	3.2	7,816	11.6

NA = not available; USDA was added in 1985, NASA was added in 1996, and DOE was added in 1999.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^b In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^c In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^d As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-8
Primary mechanism of support for full-time graduate students in science, engineering, and health: 1975–2023

(Number and percent)

Year	Total	Fellowships		Research assistantships		Teaching assistantships		Traineeships		Other types of support			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
1975	219,648	37,163	16.9	39,964	18.2	47,156	21.5	na	na	79,860	36.4	15,505	7.1
1976	223,412	36,200	16.2	42,555	19.0	48,124	21.5	na	na	74,428	33.3	22,105	9.9
1977	226,738	37,679	16.6	43,657	19.3	48,481	21.4	na	na	74,173	32.7	22,748	10.0
1978 ^a	223,030	na	na	na	na	na	na	na	na	69,920	31.4	153,110	68.6
1979	231,760	20,214	8.7	48,976	21.1	51,779	22.3	17,965	7.8	73,849	31.9	18,977	8.2
1980	238,416	20,515	8.6	51,566	21.6	53,889	22.6	17,545	7.4	75,457	31.6	19,444	8.2
1981	242,049	20,095	8.3	52,711	21.8	55,745	23.0	16,771	6.9	76,522	31.6	20,205	8.3
1982	244,757	20,855	8.5	52,580	21.5	58,334	23.8	14,637	6.0	77,896	31.8	20,455	8.4
1983	252,017	21,342	8.5	54,904	21.8	60,071	23.8	13,512	5.4	81,233	32.2	20,955	8.3
1984	253,922	21,624	8.5	57,735	22.7	61,256	24.1	13,465	5.3	79,150	31.2	20,692	8.1
1985	257,287	22,540	8.8	60,995	23.7	61,822	24.0	13,665	5.3	77,630	30.2	20,635	8.0
1986	266,168	22,954	8.6	66,010	24.8	62,552	23.5	13,526	5.1	78,880	29.6	22,246	8.4
1987	271,056	21,953	8.1	70,214	25.9	62,847	23.2	14,096	5.2	79,780	29.4	22,166	8.2
1988	275,127	22,353	8.1	74,588	27.1	63,053	22.9	14,397	5.2	79,160	28.8	21,576	7.8
1989	282,648	23,450	8.3	79,045	28.0	64,296	22.7	14,524	5.1	80,251	28.4	21,082	7.5
1990	292,782	25,254	8.6	80,746	27.6	64,950	22.2	15,198	5.2	84,384	28.8	22,250	7.6
1991	307,010	26,695	8.7	85,175	27.7	65,214	21.2	15,403	5.0	91,583	29.8	22,940	7.5
1992	322,555	28,627	8.9	88,030	27.3	65,702	20.4	15,361	4.8	101,299	31.4	23,536	7.3
1993	329,644	29,132	8.8	90,154	27.3	67,290	20.4	15,445	4.7	106,276	32.2	21,347	6.5
1994	332,088	28,892	8.7	92,008	27.7	66,844	20.1	15,681	4.7	107,035	32.2	21,628	6.5
1995	329,283	28,887	8.8	89,946	27.3	65,976	20.0	15,943	4.8	106,687	32.4	21,844	6.6
1996	328,536	28,862	8.8	87,694	26.7	65,756	20.0	15,481	4.7	109,475	33.3	21,268	6.5
1997	327,289	28,956	8.8	88,001	26.9	65,425	20.0	14,488	4.4	108,741	33.2	21,678	6.6
1998	327,389	29,106	8.9	88,097	26.9	65,173	19.9	14,946	4.6	108,224	33.1	21,843	6.7
1999	334,423	30,112	9.0	91,279	27.3	66,294	19.8	14,707	4.4	109,416	32.7	22,615	6.8
2000	341,283	31,330	9.2	94,323	27.6	66,423	19.5	14,171	4.2	112,432	32.9	22,604	6.6
2001	354,522	32,270	9.1	99,923	28.2	68,267	19.3	14,154	4.0	116,636	32.9	23,272	6.6
2002	378,991	34,849	9.2	108,185	28.5	70,732	18.7	15,006	4.0	126,654	33.4	23,565	6.2
2003	397,420	34,460	8.7	114,256	28.7	73,105	18.4	15,126	3.8	134,730	33.9	25,743	6.5
2004	402,573	35,034	8.7	114,768	28.5	73,009	18.1	14,903	3.7	137,078	34.1	27,781	6.9
2005	406,620	36,414	9.0	114,304	28.1	74,238	18.3	14,570	3.6	139,403	34.3	27,691	6.8
2006	419,015	36,689	8.8	114,774	27.4	75,911	18.1	14,571	3.5	146,606	35.0	30,464	7.3
2007 ^{old} ^b	430,860	38,340	8.9	115,192	26.7	77,817	18.1	13,437	3.1	154,293	35.8	31,781	7.4
2007 ^{new} ^b	437,365	38,631	8.8	116,043	26.5	79,948	18.3	13,497	3.1	157,029	35.9	32,217	7.4

TABLE 1-8
Primary mechanism of support for full-time graduate students in science, engineering, and health: 1975–2023

(Number and percent)

Year	Total	Fellowships		Research assistantships		Teaching assistantships		Traineeships		Other types of support			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
2008	449,613	38,599	8.6	118,349	26.3	83,135	18.5	13,317	3.0	165,658	36.8	30,555	6.8
2009	456,115	38,931	8.5	121,443	26.6	81,828	17.9	12,830	2.8	169,956	37.3	31,127	6.8
2010	461,185	39,899	8.7	123,698	26.8	83,252	18.1	12,476	2.7	170,564	37.0	31,296	6.8
2011	457,292	41,297	9.0	122,480	26.8	84,173	18.4	12,629	2.8	165,807	36.3	30,906	6.8
2012	459,498	42,005	9.1	119,347	26.0	86,295	18.8	11,646	2.5	166,900	36.3	33,305	7.2
2013	468,953	43,432	9.3	116,377	24.8	88,689	18.9	10,514	2.2	176,788	37.7	33,153	7.1
2014old ^c	484,880	42,804	8.8	115,274	23.8	90,564	18.7	11,207	2.3	191,148	39.4	33,883	7.0
2014new ^c	492,170	43,084	8.8	115,700	23.5	90,947	18.5	11,251	2.3	196,687	40.0	34,501	7.0
2015	506,262	43,460	8.6	116,425	23.0	92,513	18.3	11,175	2.2	205,678	40.6	37,011	7.3
2016	508,773	42,584	8.4	116,222	22.8	91,545	18.0	11,833	2.3	208,182	40.9	38,407	7.5
2017old ^d	498,619	42,120	8.4	110,408	22.1	91,615	18.4	12,380	2.5	200,850	40.3	41,246	8.3
2017new ^d	480,788	41,408	8.6	108,633	22.6	88,323	18.4	12,249	2.5	190,693	39.7	39,482	8.2
2018	491,449	41,779	8.5	111,469	22.7	87,682	17.8	12,896	2.6	196,114	39.9	41,509	8.4
2019	502,442	45,834	9.1	115,320	23.0	88,144	17.5	12,282	2.4	199,077	39.6	41,785	8.3
2020	491,515	43,462	8.8	115,101	23.4	85,292	17.4	12,019	2.4	192,671	39.2	42,970	8.7
2021	543,823	50,212	9.2	124,894	23.0	84,293	15.5	11,621	2.1	225,770	41.5	47,033	8.6
2022	579,301	47,647	8.2	130,185	22.5	84,893	14.7	11,717	2.0	244,299	42.2	60,560	10.5
2023	598,588	50,387	8.4	133,930	22.4	85,312	14.3	11,872	2.0	254,087	42.4	63,000	10.5
Master's students													
2017new ^d	245,010	6,535	2.7	21,681	8.8	24,193	9.9	1,992	0.8	165,485	67.5	25,124	10.3
2018	248,552	6,880	2.8	20,147	8.1	22,636	9.1	2,253	0.9	171,930	69.2	24,706	9.9
2019	254,532	7,717	3.0	20,406	8.0	23,284	9.1	2,185	0.9	176,457	69.3	24,483	9.6
2020	243,859	6,112	2.5	19,274	7.9	21,699	8.9	2,268	0.9	169,099	69.3	25,407	10.4
2021	286,954	8,928	3.1	21,173	7.4	22,172	7.7	2,009	0.7	202,659	70.6	30,013	10.5
2022	319,618	8,119	2.5	22,556	7.1	23,877	7.5	2,007	0.6	222,506	69.6	40,553	12.7
2023	329,971	8,749	2.7	23,225	7.0	23,509	7.1	2,256	0.7	229,119	69.4	43,113	13.1
Doctoral students													
2017new ^d	235,778	34,873	14.8	86,952	36.9	64,130	27.2	10,257	4.4	25,208	10.7	14,358	6.1
2018	242,897	34,899	14.4	91,322	37.6	65,046	26.8	10,643	4.4	24,184	10.0	16,803	6.9
2019	247,910	38,117	15.4	94,914	38.3	64,860	26.2	10,097	4.1	22,620	9.1	17,302	7.0
2020	247,656	37,350	15.1	95,827	38.7	63,593	25.7	9,751	3.9	23,572	9.5	17,563	7.1
2021	256,869	41,284	16.1	103,721	40.4	62,121	24.2	9,612	3.7	23,111	9.0	17,020	6.6
2022	259,683	39,528	15.2	107,629	41.4	61,016	23.5	9,710	3.7	21,793	8.4	20,007	7.7

TABLE 1-8

Primary mechanism of support for full-time graduate students in science, engineering, and health: 1975–2023

(Number and percent)

Year	Total	Fellowships		Research assistantships		Teaching assistantships		Traineeships		Other types of support			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
2023	268,617	41,638	15.5	110,705	41.2	61,803	23.0	9,616	3.6	24,968	9.3	19,887	7.4

na = not applicable.

^a Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^b In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^c In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

^d As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended.

Note(s):

Percentages may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other NCSES published data, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-9a

Graduate students in science broad fields: 1975–2023

(Number)

Year	Total	Agricultural and veterinary sciences ^{a,b}	Biological and biomedical sciences ^a	Communication ^{a,c,d}	Computer and information sciences	Family and consumer sciences and human sciences ^{a,c,d}	Geosciences, atmospheric, and ocean sciences	Mathematics and statistics	Multidisciplinary and interdisciplinary sciences ^{a,d}	Natural resources and conservation ^a	Neurobiology and neuroscience ^{a,d}	Physical sciences ^a	Psychology ^{b,e}	Social sciences ^{a,b}
1975	234,649	10,804	46,185	ne	8,415	ne	12,079	16,892	ne	NA	NA	26,310	36,191	77,773
1976	238,675	11,427	47,453	ne	8,627	ne	12,071	17,071	ne	NA	NA	26,641	37,458	77,189
1977	242,932	11,812	48,975	ne	9,108	ne	13,446	16,052	ne	NA	NA	26,864	38,617	78,058
1978 ^f	236,465	11,981	47,665	ne	9,847	ne	13,268	14,812	ne	NA	NA	26,282	37,522	75,088
1979	247,235	12,365	47,932	ne	11,690	ne	13,731	15,031	ne	NA	NA	26,701	39,766	80,019
1980	251,265	12,689	47,261	ne	13,578	ne	14,051	15,311	ne	NA	NA	26,934	40,610	80,831
1981	252,404	12,585	46,302	ne	16,437	ne	14,263	15,881	ne	NA	NA	27,360	40,666	78,910
1982	255,146	12,826	45,627	ne	19,812	ne	15,018	17,157	ne	NA	NA	28,188	40,073	76,445
1983	255,820	12,728	45,253	ne	23,333	ne	15,443	17,358	ne	NA	NA	29,463	40,905	71,337
1984	256,903	12,528	45,353	ne	25,526	ne	15,500	17,443	ne	NA	NA	30,061	40,931	69,561
1985	261,973	11,846	45,709	ne	29,769	ne	15,414	17,563	ne	NA	NA	30,987	40,721	69,964
1986	266,077	11,771	46,302	ne	31,349	ne	15,053	17,949	ne	NA	NA	32,259	41,241	70,153
1987	269,256	11,405	46,317	ne	32,051	ne	14,357	18,508	ne	NA	NA	32,741	42,612	71,265
1988	272,309	11,438	47,126	ne	32,227	ne	13,854	19,077	ne	NA	NA	32,975	43,963	71,649
1989	278,577	11,461	48,449	ne	32,482	ne	13,630	19,247	ne	NA	NA	33,629	45,528	74,151
1990	289,383	11,563	49,602	ne	34,257	ne	13,977	19,774	ne	NA	NA	34,082	48,167	77,961
1991	299,057	11,766	51,365	ne	34,681	ne	14,466	19,952	ne	NA	NA	34,724	51,343	80,760
1992	312,478	12,153	53,693	ne	36,325	ne	15,324	20,355	ne	NA	NA	35,357	53,484	85,787
1993	318,851	12,305	55,950	ne	36,213	ne	15,721	20,000	ne	NA	NA	35,328	54,557	88,777
1994	318,118	12,611	57,676	ne	34,158	ne	15,957	19,573	ne	NA	NA	34,466	54,554	89,123
1995	315,265	12,768	58,344	ne	33,458	ne	15,716	18,504	ne	NA	NA	33,399	53,641	89,435
1996	311,957	12,301	57,749	ne	34,626	ne	15,183	18,008	ne	NA	NA	32,333	53,122	88,635
1997	306,482	12,203	56,705	ne	35,991	ne	14,548	16,719	ne	NA	NA	31,105	53,126	86,085
1998	304,818	12,168	56,695	ne	38,027	ne	14,258	16,485	ne	NA	NA	30,575	52,557	84,053
1999	309,491	12,312	56,959	ne	42,478	ne	14,083	16,257	ne	NA	NA	30,691	51,727	84,984
2000	309,424	12,023	56,282	ne	47,350	ne	13,941	15,650	ne	NA	NA	30,385	50,466	83,327
2001	319,736	12,235	57,639	ne	52,196	ne	13,841	16,651	ne	NA	NA	31,038	50,454	85,682
2002	335,166	12,698	61,088	ne	55,269	ne	14,240	18,163	ne	NA	NA	32,341	51,152	90,215
2003	347,268	13,197	64,701	ne	53,696	ne	14,620	19,465	ne	NA	NA	34,298	52,162	95,129
2004	352,307	13,445	66,565	ne	50,016	ne	15,131	19,931	ne	NA	NA	35,761	54,126	97,332
2005	357,710	13,123	68,479	ne	47,978	ne	14,836	20,210	ne	NA	NA	36,375	57,282	99,427
2006	363,246	13,016	69,941	ne	47,653	ne	14,920	20,815	ne	NA	NA	36,901	57,653	102,347
2007 ^{old} ^d	372,120	13,222	71,663	ne	48,959	ne	14,675	21,335	ne	NA	NA	37,111	60,284	104,871
2007 ^{new} ^d	384,523	13,528	71,932	7,303	48,246	2,780	14,100	20,975	4,484	NA	1,584	36,824	59,617	103,150
2008	391,419	14,153	72,666	8,444	49,553	3,549	14,389	21,400	5,559	NA	2,012	37,319	58,991	103,384
2009	401,008	15,200	73,304	9,418	51,161	3,794	14,839	22,226	6,557	NA	2,356	38,149	56,184	107,820

TABLE 1-9a

Graduate students in science broad fields: 1975–2023

(Number)

Year	Total	Agricultural and veterinary sciences ^{a,b}	Biological and biomedical sciences ^a	Communication ^{a,c,d}	Computer and information sciences	Family and consumer sciences and human sciences ^{a,c,d}	Geosciences, atmospheric, and ocean sciences	Mathematics and statistics	Multidisciplinary and interdisciplinary sciences ^{a,d}	Natural resources and conservation ^a	Neurobiology and neuroscience ^{a,d}	Physical sciences ^a	Psychology ^{b,e}	Social sciences ^{a,b}
2010	407,291	15,656	74,928	9,825	51,546	4,191	15,655	23,136	7,944	NA	2,798	38,973	53,419	109,220
2011	414,440	16,129	75,423	11,029	51,234	4,509	15,820	23,801	6,537	NA	4,117	39,694	54,486	111,661
2012	413,033	16,234	76,447	11,010	51,789	4,110	16,069	24,575	6,038	NA	4,547	39,928	54,117	108,169
2013	417,251	16,429	76,649	11,114	56,339	4,014	15,816	24,804	5,892	NA	4,795	40,019	54,102	107,278
2014old ^g	425,148	16,947	76,029	11,382	68,766	4,180	15,423	25,502	6,417	NA	4,923	40,196	50,938	104,445
2014new ^g	437,395	17,505	78,490	11,942	76,546	4,302	15,710	25,874	7,196	NA	4,923	40,332	48,833	105,742
2015	448,654	18,610	80,096	11,759	86,192	4,134	15,447	26,444	8,138	NA	5,002	40,386	49,740	102,706
2016	452,046	18,284	79,146	12,347	92,650	3,750	15,015	28,050	9,251	NA	5,226	40,518	47,609	100,200
2017old ^a	450,343	17,674	82,603	11,983	90,657	3,709	14,430	28,990	9,934	NA	5,457	41,081	49,896	93,929
2017new ^a	415,568	9,347	85,217	ne	89,909	ne	12,545	29,669	9,854	10,879	NA	41,829	50,033	76,286
2018	432,255	9,538	87,933	ne	93,478	ne	12,333	31,461	10,338	11,407	NA	42,075	55,707	77,985
2019	453,691	9,518	91,993	ne	101,284	ne	11,878	33,159	11,181	11,743	NA	42,867	61,069	78,999
2020 ^b	464,646	10,800	94,825	ne	98,864	ne	11,792	31,971	14,533	12,498	NA	42,616	68,394	78,353
2021	509,784	11,244	100,883	ne	121,730	ne	12,290	34,258	15,768	13,922	NA	44,141	73,325	82,223
2022	538,166	11,596	102,700	ne	150,555	ne	11,970	34,387	20,945	13,762	NA	44,092	69,442	78,717
2023	561,489	11,755	105,566	ne	166,014	ne	11,594	33,893	26,429	13,490	NA	44,329	73,828	74,591
Master's students														
2017new ^a	229,169	5,603	33,926	ne	75,618	ne	6,006	16,568	6,923	7,311	NA	6,368	29,638	41,208
2018	241,327	5,658	35,306	ne	77,351	ne	5,629	18,073	7,414	7,691	NA	6,075	35,404	42,726
2019	259,795	5,629	38,078	ne	84,092	ne	5,327	19,594	8,203	8,066	NA	6,361	40,838	43,607
2020 ^b	267,904	6,487	39,920	ne	80,690	ne	5,277	18,284	10,980	8,793	NA	6,275	47,279	43,919
2021	305,796	6,801	42,728	ne	102,199	ne	5,520	20,639	11,994	10,012	NA	6,409	51,878	47,616
2022	331,983	6,949	43,062	ne	129,972	ne	5,186	20,798	16,931	9,807	NA	6,256	48,321	44,701
2023	348,520	6,901	44,703	ne	143,530	ne	4,793	20,105	21,928	9,486	NA	6,000	49,474	41,600
Doctoral students														
2017new ^a	186,399	3,744	51,291	ne	14,291	ne	6,539	13,101	2,931	3,568	NA	35,461	20,395	35,078
2018	190,928	3,880	52,627	ne	16,127	ne	6,704	13,388	2,924	3,716	NA	36,000	20,303	35,259
2019	193,896	3,889	53,915	ne	17,192	ne	6,551	13,565	2,978	3,677	NA	36,506	20,231	35,392
2020 ^b	196,742	4,313	54,905	ne	18,174	ne	6,515	13,687	3,553	3,705	NA	36,341	21,115	34,434
2021	203,988	4,443	58,155	ne	19,531	ne	6,770	13,619	3,774	3,910	NA	37,732	21,447	34,607
2022	206,183	4,647	59,638	ne	20,583	ne	6,784	13,589	4,014	3,955	NA	37,836	21,121	34,016
2023	212,969	4,854	60,863	ne	22,484	ne	6,801	13,788	4,501	4,004	NA	38,329	24,354	32,991

NA = not available; these fields were collected as part of other fields in other years (see footnotes a and d). ne = not eligible; the fields collected have changed over time.

^a As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Redesign includes the following: natural resources splitting from agricultural sciences; neurosciences being reported under biological and biomedical sciences; human development being reported under social sciences; physical sciences adding materials sciences; social sciences no longer including public administration; and multidisciplinary and interdisciplinary sciences no longer including nanoscience; and communication as well as family and consumer sciences were removed.

^b In 2020, for better alignment to the NCSES TOD and Classification of Instructional Programs, human development was moved from social sciences to psychology, and veterinary biomedical and clinical sciences was moved to agricultural sciences. The broad field of agricultural sciences was renamed to agricultural and veterinary sciences to reflect this change.

^c The field communication and the field family and consumer sciences and human sciences were added as part of the 2007 field eligibility changes. These fields were dropped in 2017 to align the GSS with other NCSES surveys.

^d In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. The science field communication and the science field family and consumer sciences and human sciences were newly eligible in 2007; data for these two fields begin in 2007new. The science field multidisciplinary and interdisciplinary studies was also added to the GSS code list in 2007 (and changed from "studies" to "sciences" in 2022); some data reported in this field were reported under other fields before 2007 and are included in those fields in 2007old; neuroscience is reported as a separate field of science in 2007new; data were reported under health field neurology in 2007old and previous years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^e Beginning in 2008, more rigorous follow-up was done with institutions regarding the exclusion of practitioner-oriented graduate degree programs in psychology. This change may affect interpretation of trends in this field. This follow-up was discontinued in 2017.

^f Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^g In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

Note(s):

Sum of the broad fields may not add to total because of rounding. Master's and doctoral students were not reported separately until 2017. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-9b

Postdoctoral appointees in science broad fields: 1979–2023

(Number)

Year	Total	Agricultural and veterinary sciences ^{a,b}	Biological and biomedical sciences ^a	Communication ^{a,c,d}	Computer and information sciences	Family and consumer sciences and human sciences ^{a,c,d}	Geosciences, atmospheric, and ocean sciences	Mathematics and statistics	Multidisciplinary and interdisciplinary sciences ^{a,d}	Natural resources and conservation ^a	Neurobiology and neuroscience ^{a,d}	Physical sciences ^a	Psychology ^{b,e}	Social sciences ^{a,b}
1979	12,519	228	6,866	ne	38	ne	315	162	ne	NA	NA	4,056	454	400
1980	13,042	259	7,083	ne	43	ne	312	162	ne	NA	NA	4,279	475	429
1981	13,731	292	7,678	ne	35	ne	346	113	ne	NA	NA	4,477	471	319
1982	13,698	302	7,713	ne	47	ne	340	194	ne	NA	NA	4,298	520	284
1983	14,562	318	8,337	ne	80	ne	420	170	ne	NA	NA	4,458	437	342
1984	14,979	384	8,683	ne	59	ne	493	203	ne	NA	NA	4,408	423	326
1985	15,576	374	9,128	ne	70	ne	379	226	ne	NA	NA	4,539	510	350
1986	16,512	421	9,692	ne	75	ne	420	201	ne	NA	NA	4,860	521	322
1987	17,369	453	10,353	ne	103	ne	424	229	ne	NA	NA	4,968	460	379
1988	18,024	476	10,653	ne	96	ne	496	284	ne	NA	NA	5,201	498	320
1989	18,978	522	11,425	ne	84	ne	453	225	ne	NA	NA	5,366	536	367
1990	19,853	536	11,909	ne	71	ne	594	249	ne	NA	NA	5,592	464	438
1991	20,595	580	12,455	ne	120	ne	625	206	ne	NA	NA	5,722	508	379
1992	21,514	640	13,158	ne	145	ne	692	201	ne	NA	NA	5,792	525	361
1993	22,219	720	13,778	ne	164	ne	765	224	ne	NA	NA	5,669	521	378
1994	23,181	729	14,379	ne	185	ne	824	239	ne	NA	NA	5,884	551	390
1995	23,512	724	14,659	ne	213	ne	845	262	ne	NA	NA	5,851	582	376
1996	23,892	699	14,890	ne	250	ne	861	326	ne	NA	NA	5,828	594	444
1997	24,293	724	15,082	ne	322	ne	942	308	ne	NA	NA	5,968	586	361
1998	25,023	695	15,761	ne	374	ne	902	279	ne	NA	NA	6,004	617	391
1999	25,784	750	16,097	ne	334	ne	925	351	ne	NA	NA	6,157	716	454
2000	26,911	822	16,734	ne	344	ne	1,155	385	ne	NA	NA	6,270	730	471
2001	27,044	833	17,032	ne	336	ne	1,049	353	ne	NA	NA	6,223	809	409
2002	28,371	963	17,640	ne	356	ne	1,129	395	ne	NA	NA	6,619	815	454
2003	29,856	1,054	18,625	ne	355	ne	1,182	449	ne	NA	NA	6,829	960	402
2004	30,116	959	18,716	ne	384	ne	1,263	468	ne	NA	NA	7,059	902	365
2005	30,290	1,007	18,747	ne	406	ne	1,364	500	ne	NA	NA	7,011	884	371
2006	30,245	927	18,807	ne	467	ne	1,495	579	ne	NA	NA	6,703	873	394
2007old ^d	30,986	948	19,218	ne	516	ne	1,322	621	ne	NA	NA	6,760	1,106	495
2007new ^d	31,281	985	19,109	30	456	8	1,250	624	244	NA	285	6,719	1,088	483
2008	32,741	1,147	19,827	32	493	19	1,339	723	348	NA	343	6,885	1,077	508
2009	34,388	1,083	20,159	38	594	22	1,424	737	459	NA	645	7,447	1,219	561
2010 ^{f,g}	37,351	1,190	21,726	62	763	30	1,740	791	785	NA	838	7,583	1,132	711
2011 ^g	37,335	1,256	21,107	67	759	52	1,774	830	704	NA	1,398	7,490	1,124	774
2012	36,738	1,290	20,086	58	760	58	1,956	902	742	NA	1,525	7,430	1,132	799
2013	36,289	1,319	19,330	76	765	90	2,032	932	891	NA	1,696	7,197	1,023	938

TABLE 1-9b

Postdoctoral appointees in science broad fields: 1979–2023

(Number)

Year	Total	Agricultural and veterinary sciences ^{a,b}	Biological and biomedical sciences ^a	Communication ^{a,c,d}	Computer and information sciences	Family and consumer sciences and human sciences ^{a,c,d}	Geosciences, atmospheric, and ocean sciences	Mathematics and statistics	Multidisciplinary and interdisciplinary sciences ^{a,d}	Natural resources and conservation ^a	Neurobiology and neuroscience ^{a,d}	Physical sciences ^a	Psychology ^{b,e}	Social sciences ^{a,b}
2014old ^h	36,184	1,395	18,749	75	833	93	2,059	956	1,045	NA	1,778	7,089	1,062	1,050
2014new ^h	37,316	1,402	19,554	75	834	114	2,061	959	1,045	NA	1,878	7,277	1,066	1,051
2015	37,639	1,525	19,304	83	888	103	2,129	1,011	972	NA	1,957	7,358	1,130	1,179
2016	37,941	1,484	19,427	86	914	116	2,104	1,005	1,095	NA	2,071	7,269	1,177	1,193
2017old ^a	37,816	1,620	19,506	89	856	163	2,136	966	1,126	NA	2,109	6,946	1,072	1,227
2017new ^a	38,241	1,024	21,781	ne	854	ne	2,089	991	1,131	731	NA	7,211	1,082	1,347
2018	37,564	1,072	21,533	ne	879	ne	1,726	982	980	764	NA	6,976	1,145	1,507
2019	38,503	1,079	21,847	ne	878	ne	1,778	1,070	972	806	NA	7,159	1,152	1,762
2020	38,741	1,678	21,902	ne	823	ne	1,790	1,076	832	845	NA	6,937	1,312	1,546
2021	37,189	1,595	20,245	ne	880	ne	1,797	1,112	878	889	NA	6,823	1,325	1,645
2022	36,673	1,705	19,585	ne	859	ne	1,787	1,110	840	936	NA	6,877	1,308	1,666
2023	37,982	1,993	19,520	ne	987	ne	1,919	1,220	988	937	NA	7,220	1,344	1,854

NA = not available; these fields were collected as part of other fields in other years (see footnotes a and d). ne = not eligible; the fields collected have changed over time.

^a As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Redesign includes the following: natural resources splitting from agricultural sciences; neurosciences being reported under biological and biomedical sciences; human development being reported under social sciences; physical sciences adding materials sciences; and social sciences no longer including public administration (no longer collected); and multidisciplinary and interdisciplinary sciences no longer including nanoscience (which was moved to engineering).

^b In 2020, for better alignment to the NCSES TOD and Classification of Instructional Programs, human development was moved from social sciences to psychology, and veterinary biomedical and clinical sciences was moved to agricultural sciences. The broad field of agricultural sciences was renamed to agricultural and veterinary sciences to reflect this change.

^c The field communication and the field family and consumer sciences and human sciences were added as part of the 2007 field eligibility changes. These fields were dropped in 2017 to align the GSS with other NCSES surveys.

^d In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. The science field communication and the science field family and consumer sciences and human sciences were newly eligible in 2007; data for these two fields begin in 2007new. The science field multidisciplinary and interdisciplinary studies was also added to the GSS code list in 2007 (and changed from "studies" to "sciences" in 2022); some data reported in this field were reported under other fields before 2007 and are included in those fields in 2007old; neuroscience is reported as a separate field of science in 2007new; data were reported under health field neurology in 2007old and previous years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^e Beginning in 2008, more rigorous follow-up was done with institutions regarding the exclusion of practitioner-oriented graduate degree programs in psychology. This change may affect interpretation of trends in this field. This follow-up was discontinued in 2017.

^f In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/inbrief/nsf13334/>.

^g Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^h In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

Note(s):

For postdoctoral appointees, "field" refers to the field of the unit that reports information on this group to the GSS. Sum of the broad fields may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-9c

Doctorate-holding nonfaculty researchers in science broad fields: 1979–2023

(Number)

Year	Total	Agricultural and veterinary sciences ^{a,b}	Biological and biomedical sciences ^a	Communication ^{a,c,d}	Computer and information sciences	Family and consumer sciences and human sciences ^{a,c,d}	Geosciences, atmospheric, and ocean sciences	Mathematics and statistics	Multidisciplinary and interdisciplinary sciences ^{a,d}	Natural resources and conservation ^a	Neurobiology and neuroscience ^{a,d}	Physical sciences ^a	Psychology ^{b,e}	Social sciences ^{a,b}
1979	1,915	58	932	ne	44	ne	104	69	ne	NA	NA	464	63	181
1980	2,184	74	1,100	ne	51	ne	154	84	ne	NA	NA	475	103	143
1981	2,445	68	1,055	ne	57	ne	143	112	ne	NA	NA	632	156	222
1982	2,809	79	1,267	ne	47	ne	239	82	ne	NA	NA	809	150	136
1983	3,348	179	1,566	ne	61	ne	309	125	ne	NA	NA	759	158	191
1984	3,442	142	1,611	ne	58	ne	245	125	ne	NA	NA	856	221	184
1985	3,529	125	1,638	ne	78	ne	186	176	ne	NA	NA	967	210	149
1986	3,356	155	1,582	ne	97	ne	193	54	ne	NA	NA	924	216	135
1987	3,250	118	1,545	ne	123	ne	202	70	ne	NA	NA	848	256	88
1988	3,348	118	1,608	ne	98	ne	200	89	ne	NA	NA	960	174	101
1989	3,470	150	1,709	ne	68	ne	228	65	ne	NA	NA	991	180	79
1990	3,745	192	1,743	ne	61	ne	315	92	ne	NA	NA	1,006	198	138
1991	3,872	210	1,846	ne	50	ne	298	86	ne	NA	NA	1,007	192	183
1992	3,660	200	1,688	ne	42	ne	304	71	ne	NA	NA	1,071	152	132
1993	4,003	174	1,838	ne	67	ne	340	53	ne	NA	NA	1,225	171	135
1994	4,156	256	1,841	ne	49	ne	363	72	ne	NA	NA	1,244	203	128
1995	4,395	234	1,950	ne	66	ne	421	93	ne	NA	NA	1,381	146	104
1996	4,426	210	1,905	ne	107	ne	431	88	ne	NA	NA	1,291	232	162
1997	4,408	203	1,984	ne	87	ne	431	92	ne	NA	NA	1,208	225	178
1998	4,497	159	2,238	ne	125	ne	415	88	ne	NA	NA	1,083	252	137
1999	4,761	168	2,331	ne	133	ne	436	122	ne	NA	NA	1,157	250	164
2000	4,931	219	2,245	ne	153	ne	486	80	ne	NA	NA	1,271	326	151
2001	4,707	229	2,323	ne	150	ne	477	54	ne	NA	NA	1,081	254	139
2002	5,019	275	2,551	ne	123	ne	606	36	ne	NA	NA	1,089	210	129
2003	5,493	254	2,859	ne	127	ne	603	47	ne	NA	NA	1,245	240	118
2004	5,880	301	2,976	ne	170	ne	587	69	ne	NA	NA	1,374	249	154
2005	6,069	287	2,992	ne	152	ne	584	64	ne	NA	NA	1,576	257	157
2006	6,658	305	3,353	ne	184	ne	639	89	ne	NA	NA	1,615	261	212
2007old ^d	6,517	256	3,257	ne	195	ne	613	108	ne	NA	NA	1,643	277	168
2007new ^d	6,526	264	3,205	4	179	8	610	108	28	NA	14	1,670	268	168
2008	8,669	458	4,514	6	228	8	751	91	219	NA	23	1,826	297	248
2009	8,698	431	4,213	9	331	31	774	160	231	NA	77	1,773	291	377
2010 ^{f,g}	12,751	572	6,271	24	318	38	1,362	173	467	NA	191	2,251	467	617
2011 ^g	13,363	581	6,224	17	326	101	1,625	174	509	NA	378	2,322	434	672
2012	13,264	567	6,249	14	349	43	1,513	209	497	NA	356	2,296	431	740
2013	13,932	550	6,527	34	459	43	1,518	224	538	NA	417	2,312	457	853

TABLE 1-9c

Doctorate-holding nonfaculty researchers in science broad fields: 1979–2023

(Number)

Year	Total	Agricultural and veterinary sciences ^{a,b}	Biological and biomedical sciences ^a	Communication ^{a,c,d}	Computer and information sciences	Family and consumer sciences and human sciences ^{a,c,d}	Geosciences, atmospheric, and ocean sciences	Mathematics and statistics	Multidisciplinary and interdisciplinary sciences ^{a,d}	Natural resources and conservation ^a	Neurobiology and neuroscience ^{a,d}	Physical sciences ^a	Psychology ^{b,e}	Social sciences ^{a,b}
2014old ^h	14,283	609	6,492	34	450	57	1,499	221	658	NA	650	2,433	411	769
2014new ^h	14,674	616	6,841	34	450	59	1,500	221	661	NA	666	2,445	411	770
2015	15,667	747	6,948	31	459	74	1,754	235	630	NA	718	2,701	472	898
2016	15,940	767	7,058	29	470	120	1,635	213	727	NA	760	2,735	456	970
2017old ^a	na	na	na	na	na	na	na	na	na	NA	na	na	na	na
2017new ^a	17,268	496	8,203	ne	476	ne	1,794	240	806	364	NA	2,871	494	1,524
2018	18,278	565	8,250	ne	515	ne	2,106	266	832	580	NA	3,056	507	1,601
2019	18,819	645	8,229	ne	510	ne	2,177	305	820	582	NA	3,316	576	1,659
2020	18,212	964	8,112	ne	458	ne	2,150	201	679	573	NA	2,890	749	1,436
2021	18,728	902	8,187	ne	457	ne	2,308	235	816	620	NA	2,895	803	1,505
2022	19,423	1,068	8,207	ne	507	ne	2,448	251	931	605	NA	2,894	786	1,726
2023	20,600	1,238	8,589	ne	631	ne	2,455	307	818	663	NA	3,095	950	1,854

na = not applicable. NA = not available; these fields were collected as part of other fields in other years (see footnotes a and d). ne = not eligible; the fields collected have changed over time.

^a As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Redesign includes the following: natural resources splitting from agricultural sciences; neurosciences being reported under biological and biomedical sciences; human development being reported under psychology; physical sciences adding materials sciences; social sciences no longer including public administration (no longer collected); and multidisciplinary and interdisciplinary sciences no longer including nanoscience.

^b In 2020, for better alignment to the NCSES TOD and Classification of Instructional Programs, human development was moved from social sciences to psychology, and veterinary biomedical and clinical sciences was moved to agricultural sciences. The broad field of agricultural sciences was renamed to agricultural and veterinary sciences to reflect this change.

^c The field communication and the field family and consumer sciences and human sciences were added as part of the 2007 field eligibility changes. These fields were dropped in 2017 to align the GSS with other NCSES surveys.

^d In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. The science field communication and the science field and consumer sciences and human sciences were newly eligible in 2007; data for these two fields begin in 2007new. The science field multidisciplinary and interdisciplinary studies was also added to the GSS code list in 2007 (and changed from "studies" to "sciences" in 2022); some data reported in this field were reported under other fields before 2007 and are included in those fields in 2007old; neuroscience is reported as a separate field of science in 2007new; data were reported under health field neurology in 2007old and previous years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^e Beginning in 2008, more rigorous follow-up was done with institutions regarding the exclusion of practitioner-oriented graduate degree programs in psychology. This change may affect interpretation of trends in this field. This follow-up was discontinued in 2017.

^f In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/inbrief/nsf13334/>.

^g Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.

^h In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

Note(s):

For doctorate-holding NFRs, "field" refers to the field of the unit that reports information on these groups to the GSS. Sum of the broad fields may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-10a

Graduate students in engineering broad fields: 1975–2023

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Biological, biomedical, and biosystems engineering	Chemical, petroleum, and chemical-related engineering	Civil, environmental, transportation and related engineering fields ^a	Electrical, electronics, communications and computer engineering	Industrial, manufacturing, systems engineering and operations research	Mechanical engineering	Metallurgical, mining, materials and related engineering fields ^b	Other engineering ^c
1975	68,332	1,670	883	5,397	12,560	16,320	11,663	8,601	2,788	8,450
1976	66,723	1,477	895	5,647	11,995	15,926	10,687	8,313	2,913	8,870
1977	68,757	1,518	855	5,652	12,335	17,406	10,438	8,722	3,037	8,794
1978 ^d	67,787	1,463	920	5,859	12,358	17,127	9,494	8,638	3,008	8,920
1979	71,808	1,481	1,004	6,109	12,822	17,715	10,729	9,251	3,167	9,530
1980	74,335	1,737	964	6,541	13,097	19,132	9,698	9,888	3,347	9,931
1981	79,585	1,883	1,017	7,047	14,089	20,113	9,737	10,618	3,614	11,467
1982	83,720	1,941	1,085	7,808	14,122	21,927	9,577	11,467	3,603	12,190
1983	91,146	2,305	1,220	8,327	14,910	25,295	9,247	12,911	4,001	12,930
1984	92,739	2,340	1,315	8,144	15,192	26,388	9,282	13,855	4,175	12,048
1985	96,018	2,538	1,335	7,959	14,902	28,203	10,525	14,157	4,448	11,951
1986	101,905	2,804	1,487	7,790	14,976	29,969	11,569	15,713	4,748	12,849
1987	103,983	3,015	1,628	7,959	14,682	31,399	12,353	16,366	4,910	11,671
1988	102,854	3,223	1,708	7,385	14,811	32,035	11,575	16,151	4,870	11,096
1989	104,065	3,524	1,867	7,147	14,909	33,257	11,333	16,265	5,053	10,710
1990	107,658	3,934	2,097	7,438	15,542	33,722	11,555	16,879	5,420	11,071
1991	113,535	4,120	2,199	7,862	17,398	35,111	12,996	17,730	5,692	10,427
1992	118,039	4,036	2,492	8,170	19,572	36,428	13,826	18,637	5,987	8,891
1993	116,872	3,940	2,640	8,279	19,583	35,290	13,905	18,477	5,837	8,921
1994	113,024	3,715	2,716	8,263	19,925	33,067	13,992	17,761	5,652	7,933
1995	107,201	3,343	2,693	8,062	19,218	30,861	13,475	16,363	5,329	7,857
1996	103,224	3,208	2,689	7,970	18,528	29,941	12,675	15,509	5,118	7,586
1997	101,148	3,083	2,797	7,849	17,193	30,787	11,957	15,045	5,036	7,401
1998	100,038	3,137	2,855	7,664	16,517	31,384	11,221	14,696	4,984	7,580
1999	101,691	3,349	3,069	7,525	16,226	31,822	11,803	14,956	4,809	8,132
2000	104,112	3,407	3,197	7,683	16,451	33,611	12,119	15,235	4,664	7,745
2001	109,493	3,451	3,599	7,569	16,665	36,100	12,940	15,852	4,961	8,356
2002	119,668	3,685	4,338	8,180	17,713	39,948	14,033	17,139	5,259	9,373
2003	127,377	4,048	5,301	8,365	18,890	41,763	14,313	18,393	5,409	10,895
2004	123,566	4,089	5,807	8,297	18,561	38,995	13,852	17,852	5,367	10,746
2005	120,565	4,170	6,067	7,981	18,114	37,450	13,650	17,373	5,439	10,321
2006	123,041	4,482	6,482	8,074	17,802	38,265	13,829	17,919	5,512	10,676
2007old ^a	130,255	4,616	6,881	8,397	19,867	40,207	14,290	18,366	5,672	11,959
2007new ^a	131,676	4,616	6,904	8,598	16,071	40,588	14,474	18,347	5,536	16,542
2008	137,856	4,902	7,339	8,901	16,931	41,164	15,692	19,585	5,829	17,513
2009	144,677	5,266	7,904	9,378	18,638	41,218	15,825	21,243	6,175	19,030

TABLE 1-10a

Graduate students in engineering broad fields: 1975–2023

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Biological, biomedical, and biosystems engineering	Chemical, petroleum, and chemical-related engineering	Civil, environmental, transportation and related engineering fields ^a	Electrical, electronics, communications and computer engineering	Industrial, manufacturing, systems engineering and operations research	Mechanical engineering	Metallurgical, mining, materials and related engineering fields ^b	Other engineering ^c
2010	149,241	5,540	8,497	9,963	19,559	41,336	15,205	22,509	6,693	19,939
2011	146,501	5,691	9,175	10,129	19,596	41,580	14,494	21,883	7,149	16,804
2012	148,385	5,069	9,157	10,747	19,922	42,347	14,469	23,088	7,341	16,245
2013	153,049	5,181	9,198	11,307	20,110	45,562	14,363	24,087	7,501	15,740
2014old ^e	162,013	5,116	9,510	11,909	20,660	50,051	14,659	25,508	7,869	16,731
2014new ^e	164,488	5,116	9,510	11,926	20,789	51,909	14,845	25,651	7,914	16,828
2015	169,354	5,345	9,761	12,029	20,978	52,940	16,284	27,314	8,148	16,555
2016	168,443	5,416	10,208	12,049	20,569	50,062	16,200	27,898	8,484	17,557
2017old ^b	166,819	na	na	na	na	na	na	na	na	na
2017new ^b	165,581	5,708	11,116	11,744	21,132	47,752	15,905	27,428	7,082	17,714
2018	163,301	5,848	11,763	11,414	20,461	46,227	15,987	26,593	7,216	17,792
2019	164,004	6,255	12,358	10,938	19,625	46,754	15,674	26,108	7,083	19,209
2020	157,729	6,971	12,775	10,554	18,304	43,032	14,869	25,782	7,181	18,261
2021	168,050	7,838	14,059	10,696	19,608	45,265	15,870	27,258	7,422	20,034
2022	176,000	8,095	14,442	10,601	20,375	49,901	16,435	27,552	7,118	21,481
2023	175,559	8,264	15,203	10,546	19,934	48,799	15,762	27,014	7,244	22,793
Master's students										
2017new ^b	96,756	3,322	4,108	4,208	13,506	29,816	12,272	16,279	2,427	10,818
2018	93,064	3,342	4,282	3,815	12,729	28,108	12,389	15,434	2,395	10,570
2019	91,939	3,701	4,424	3,274	11,873	28,177	11,912	14,861	2,266	11,451
2020	86,450	4,326	4,536	2,942	10,819	25,312	11,030	14,305	2,299	10,881
2021	95,126	5,065	5,192	2,983	11,730	27,695	11,949	15,718	2,518	12,276
2022	103,020	5,263	5,177	3,011	12,621	32,316	12,579	16,029	2,545	13,479
2023	100,567	5,380	5,204	2,658	12,082	31,093	11,873	15,335	2,462	14,480
Doctoral students										
2017new ^b	68,825	2,386	7,008	7,536	7,626	17,936	3,633	11,149	4,655	6,896
2018	70,237	2,506	7,481	7,599	7,732	18,119	3,598	11,159	4,821	7,222
2019	72,065	2,554	7,934	7,664	7,752	18,577	3,762	11,247	4,817	7,758
2020	71,279	2,645	8,239	7,612	7,485	17,720	3,839	11,477	4,882	7,380
2021	72,924	2,773	8,867	7,713	7,878	17,570	3,921	11,540	4,904	7,758
2022	72,980	2,832	9,265	7,590	7,754	17,585	3,856	11,523	4,573	8,002
2023	74,992	2,884	9,999	7,888	7,852	17,706	3,889	11,679	4,782	8,313

na = not applicable; data were not collected at this level of detail in the year shown.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. Architecture is reported as a separate field of engineering in 2007new; data were reported under civil engineering in 2007old and previous years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.

^b As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Materials sciences was reported as part of metallurgical and materials engineering from 2011–16; starting in 2017, materials sciences is reported as part of physical sciences, nanotechnology was reported as part of the science detailed field multidisciplinary and interdisciplinary studies from 2007–16; and starting in 2017, architecture was removed.

^c Other engineering includes agricultural engineering; engineering mechanics, science, and physics; nuclear engineering; engineering, other; and, from 2007new to 2017old, architecture. Architecture was reported under civil engineering in 2007old and previous years.

^d Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^e In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.

Note(s):

Prior to 2020, there were no broad fields in engineering, and this table includes all engineering detailed fields. All fields have been moved to match the current broad field organization. Master's and doctoral students were not reported separately until 2017. Sum of the broad fields may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-10b

Postdoctoral appointees in engineering broad fields: 1979–2023

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Biological, biomedical, and biosystems engineering	Chemical, petroleum, and chemical-related engineering	Civil, environmental, transportation and related engineering fields ^a	Electrical, electronics, communications and computer engineering	Industrial, manufacturing, systems engineering and operations research	Mechanical engineering	Metallurgical, mining, materials and related engineering fields ^b	Other engineering ^c
1979	1,067	32	28	198	128	142	8	143	214	174
1980	981	20	25	191	122	123	16	137	175	172
1981	1,040	14	32	175	103	191	13	130	210	172
1982	980	25	28	181	103	178	9	130	178	148
1983	1,108	32	27	200	131	180	13	182	223	120
1984	1,203	42	31	250	146	178	21	196	186	153
1985	1,356	51	46	280	122	183	18	207	264	185
1986	1,405	48	53	299	140	175	25	240	275	150
1987	1,446	43	44	322	174	177	26	216	309	135
1988	1,690	48	47	433	203	187	32	218	388	134
1989	1,928	38	69	486	182	193	32	304	413	211
1990	1,950	67	71	572	168	242	6	222	382	220
1991	2,262	77	59	595	186	346	27	326	403	243
1992	2,369	92	79	556	188	318	38	352	473	273
1993	2,446	116	80	542	181	388	63	358	422	296
1994	2,606	100	135	541	210	411	54	388	465	302
1995	2,648	101	129	585	201	381	30	410	509	302
1996	2,677	109	140	551	230	395	30	425	506	291
1997	2,971	125	154	657	248	508	28	440	476	335
1998	2,853	133	180	627	225	488	30	434	414	322
1999	3,196	128	242	690	299	548	27	476	427	359
2000	3,313	111	220	723	295	525	48	480	515	396
2001	3,152	128	262	591	268	436	21	501	493	452
2002	3,566	140	284	773	342	613	43	441	517	413
2003	3,810	141	388	703	300	646	45	543	551	493
2004	3,949	141	425	703	313	654	50	514	576	573
2005	4,166	153	477	715	384	689	51	562	586	549
2006	4,642	165	591	753	458	721	51	644	582	677
2007 ^{old} ^a	4,908	178	640	780	419	885	73	725	559	649
2007 ^{new} ^a	4,942	178	640	812	417	884	71	722	569	649
2008	5,462	154	710	908	465	987	115	784	610	729
2009	6,416	168	960	1,120	535	1,025	109	948	762	789
2010 ^{d,e}	6,969	212	1,023	1,121	571	1,095	151	1,021	845	930
2011 ^e	6,786	202	1,069	1,172	551	1,035	121	889	864	883
2012	7,103	170	1,161	1,151	590	1,152	127	985	859	908
2013	7,106	202	1,103	1,279	587	1,180	133	1,034	816	772

TABLE 1-10b

Postdoctoral appointees in engineering broad fields: 1979–2023

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Biological, biomedical, and biosystems engineering	Chemical, petroleum, and chemical-related engineering	Civil, environmental, transportation and related engineering fields ^a	Electrical, electronics, communications and computer engineering	Industrial, manufacturing, systems engineering and operations research	Mechanical engineering	Metallurgical, mining, materials and related engineering fields ^b	Other engineering ^c
2014old ^f	7,292	220	1,196	1,310	629	1,177	131	1,055	791	783
2014new ^f	7,307	220	1,198	1,310	629	1,179	131	1,058	795	787
2015	7,656	217	1,201	1,356	670	1,160	142	1,161	926	823
2016	7,796	201	1,278	1,290	706	1,186	130	1,080	892	1,033
2017old ^b	7,929	na	na	na	na	na	na	na	na	na
2017new ^b	7,839	196	1,476	1,262	804	1,170	127	1,089	565	1,150
2018	7,914	207	1,529	1,205	739	1,197	156	1,069	575	1,237
2019	8,266	227	1,602	1,229	865	1,305	167	1,142	665	1,064
2020	8,462	233	1,696	1,157	1,006	1,302	194	1,149	630	1,095
2021	8,340	277	1,616	1,167	968	1,275	127	1,200	562	1,148
2022	8,335	244	1,540	1,239	1,018	1,217	143	1,189	542	1,203
2023	9,051	254	1,594	1,501	1,070	1,339	170	1,317	557	1,249

na = not applicable; data were not collected at this level of detail in the year shown.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. Architecture is reported as a separate field of engineering in 2007new; data were reported under civil engineering in 2007old and previous years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.^b As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Materials sciences was reported as part of metallurgical and materials engineering from 2011–16; starting in 2017, materials sciences is reported as part of physical sciences, nanotechnology was reported as part of the science detailed field multidisciplinary and interdisciplinary studies from 2007–16; and starting in 2017, architecture was removed.^c Other engineering includes agricultural engineering; engineering mechanics, science, and physics; nuclear engineering; engineering, other; and, from 2007new to 2017old, architecture. Architecture was reported under civil engineering in 2007old and previous years.^d In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.^e Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.^f In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314/>.**Note(s):**Prior to 2020, there were no broad fields in engineering and this table includes all engineering detailed fields. All fields have been moved to match the current broad field organization. For postdoctoral appointees, "field" refers to the field of the unit that reports information on this group to the GSS. Sum of the broad fields may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-10c

Doctorate-holding nonfaculty researchers in engineering broad fields: 1979–2023

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Biological, biomedical, and biosystems engineering	Chemical, petroleum, and chemical-related engineering	Civil, environmental, transportation and related engineering fields ^a	Electrical, electronics, communications and computer engineering	Industrial, manufacturing, systems engineering and operations research	Mechanical engineering	Metallurgical, mining, materials and related engineering fields ^b	Other engineering ^c
1979	273	18	6	38	25	65	3	45	30	43
1980	423	31	4	51	38	77	14	68	80	60
1981	503	8	3	75	30	81	4	113	96	93
1982	670	26	9	96	114	74	27	149	98	77
1983	631	24	8	54	86	127	10	128	97	97
1984	589	22	12	66	51	149	9	86	100	94
1985	615	21	14	83	31	149	3	112	131	71
1986	521	34	5	76	33	88	2	84	129	70
1987	443	28	6	51	38	62	13	85	97	63
1988	566	21	6	78	39	115	7	107	124	69
1989	581	14	18	76	37	114	11	89	120	102
1990	609	24	12	82	51	104	21	127	104	84
1991	659	26	16	74	54	121	20	113	150	85
1992	737	39	26	160	52	123	17	97	133	90
1993	805	69	25	144	67	135	8	116	147	94
1994	825	66	36	104	54	159	6	135	141	124
1995	789	80	26	81	66	175	3	108	123	127
1996	731	86	21	92	70	144	2	108	102	106
1997	848	84	31	163	66	168	8	109	86	133
1998	810	68	34	155	61	152	5	109	121	105
1999	940	87	58	151	81	169	5	127	117	145
2000	896	39	42	120	131	145	7	176	109	127
2001	801	15	36	97	98	118	12	133	107	185
2002	903	17	43	101	118	131	22	121	109	241
2003	952	30	49	100	98	172	11	125	149	218
2004	1,043	60	67	101	111	175	26	175	179	149
2005	946	54	58	89	113	178	24	165	128	137
2006	1,118	66	65	168	134	158	41	170	144	172
2007old ^a	1,298	29	91	155	141	304	32	199	152	195
2007new ^a	1,310	29	91	163	143	310	27	199	153	195
2008	1,419	41	89	188	161	283	67	193	134	263
2009	1,737	40	153	241	181	296	76	246	181	323
2010 ^{d,e}	2,406	58	250	288	256	395	108	355	231	465
2011 ^e	2,312	35	247	240	278	406	87	318	237	464
2012	2,497	49	295	251	298	405	70	389	255	485
2013	2,494	40	238	304	296	431	77	403	283	422

TABLE 1-10c

Doctorate-holding nonfaculty researchers in engineering broad fields: 1979–2023

(Number)

Year	Total	Aerospace, aeronautical, and astronautical engineering	Biological, biomedical, and biosystems engineering	Chemical, petroleum, and chemical-related engineering	Civil, environmental, transportation and related engineering fields ^a	Electrical, electronics, communications and computer engineering	Industrial, manufacturing, systems engineering and operations research	Mechanical engineering	Metallurgical, mining, materials and related engineering fields ^b	Other engineering ^c
2014old ^f	2,744	43	322	339	313	459	90	437	287	454
2014new ^f	2,745	43	322	339	313	459	90	438	287	454
2015	2,929	67	289	320	364	492	150	425	315	507
2016	3,155	77	311	354	420	560	162	393	376	502
2017old ^b	na	na	na	na	na	na	na	na	na	na
2017new ^b	3,274	102	451	340	422	557	119	458	233	592
2018	3,570	115	491	337	414	588	105	489	267	764
2019	3,909	124	545	410	492	637	137	531	303	730
2020	3,921	149	525	330	488	706	155	469	299	800
2021	3,992	144	589	307	479	755	107	529	259	823
2022	4,355	153	685	313	569	734	197	527	280	897
2023	4,575	166	674	349	654	799	221	560	249	903

na = not applicable; data were not collected at this level of detail in the year shown.

^a In 2007, eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of eligible units. "2007new" presents data as collected in 2007; "2007old" shows data as they would have been collected in prior years. Architecture is reported as a separate field of engineering in 2007new; data were reported under civil engineering in 2007old and previous years. See appendix A in <https://www.nsf.gov/statistics/nsf10307/> for more detail.^b As part of the 2017 Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) redesign, the GSS taxonomy was changed to align with the National Center for Science and Engineering Statistics (NCSES) Taxonomy of Disciplines (TOD), thus increasing comparability with other NCSES surveys. As a result, some eligible fields were reclassified and a small number of fields became fully or partially ineligible. Comparisons to prior years should use the 2017old estimates and should be limited to broad areas of study—detailed field comparisons are not recommended. Materials sciences was reported as part of metallurgical and materials engineering from 2011–16; starting in 2017, materials sciences is reported as part of physical sciences, nanotechnology was reported as part of the science detailed field multidisciplinary and interdisciplinary studies from 2007–16; and starting in 2017, architecture was removed.^c Other engineering includes agricultural engineering; engineering mechanics, science, and physics; nuclear engineering; engineering, other; and, from 2007new to 2017old, architecture. Architecture was reported under civil engineering in 2007old and previous years.^d In 2010, the postdoctoral appointee (postdoc) and nonfaculty researcher (NFR) section of the survey was expanded and significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. Thus, it is unclear how much of the increases in 2010 and later years over 2009 and prior years are from growth in postdocs and NFRs and how much are from improved data collection. More information on the changes to the data collection is available at <https://www.nsf.gov/statistics/infbrief/nsf13334/>.^e Postdoc and NFR data from 2010 and 2011 were reimputed following the 2012 data collection; these data supersede those contained in previous reports.^f In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. For more information, see <https://www.nsf.gov/statistics/2016/nsf16314>.**Note(s):**For doctorate-holding NFRs, "field" refers to the field of the unit that reports information on this group to the GSS. Prior to 2020, there were no broad fields in engineering, and this table includes all engineering detailed fields. All fields have been moved to match the current broad field organization. Sum of the broad fields may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-11a

Master's student enrollment, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
All fields	378,587	391,211	408,228	414,478	466,613	501,311	510,866
Science	229,169	241,327	259,795	267,904	305,796	331,983	348,520
Agricultural and veterinary sciences ^a	5,603	5,658	5,629	6,487	6,801	6,949	6,901
Agricultural sciences	5,603	5,658	5,629	5,589	5,790	6,165	6,218
Veterinary biomedical and clinical sciences ^b	na	na	na	898	1,011	784	683
Biological and biomedical sciences ^a	33,926	35,306	38,078	39,920	42,728	43,062	44,703
Biochemistry	791	743	808	889	1,005	911	778
Biology	8,791	8,696	8,635	8,381	8,294	7,969	7,988
Biomedical sciences	4,298	4,379	5,241	5,898	5,794	5,681	6,391
Biophysics	18	6	7	8	6	8	9
Biostatistics and bioinformatics	2,540	2,890	3,036	3,143	3,519	3,852	4,240
Biotechnology	1,893	1,953	3,157	3,143	3,395	3,916	4,420
Botany and plant biology	378	373	392	376	363	369	378
Cell, cellular biology, and anatomical sciences	926	919	927	954	1,210	1,137	1,031
Ecology and population biology	921	888	939	1,052	1,201	1,058	1,035
Epidemiology	2,577	2,669	2,776	3,153	3,623	3,844	3,837
Genetics	512	557	581	620	718	749	693
Microbiological sciences and immunology	1,037	1,254	1,370	1,649	2,011	2,026	1,934
Molecular biology	277	364	378	378	405	408	388
Neurobiology and neuroscience	318	304	362	545	591	515	480
Nutrition science	2,144	2,546	2,385	2,370	2,871	2,905	2,959
Pathology and experimental pathology	122	93	87	105	100	106	143
Pharmacology and toxicology	881	873	923	770	926	996	844
Physiology	2,229	2,288	2,594	3,044	2,898	2,891	2,951
Zoology and animal biology	759	829	891	869	927	861	901
Biological and biomedical sciences nec	2,514	2,682	2,589	2,573	2,871	2,860	3,303
Computer and information sciences	75,618	77,351	84,092	80,690	102,199	129,972	143,530
Computer science	22,786	22,966	24,628	22,670	30,361	42,092	46,477
Computer and information sciences ^c	30,217	30,568	33,698	27,044	35,308	45,098	48,392
Computer and information sciences ^d	NA	NA	NA	23,625	30,804	39,719	41,959
Artificial intelligence, informatics, and computer and information science topics ^d	NA	NA	NA	3,419	4,504	5,379	6,433
Computer and information sciences nec ^c	22,615	23,817	25,766	30,976	36,530	42,782	48,661
Computer and information systems security ^d	NA	NA	NA	7,023	8,401	9,254	10,774
Information science and studies ^d	NA	NA	NA	11,671	13,098	15,478	16,138
Information technology ^d	NA	NA	NA	5,618	7,527	10,601	14,484

TABLE 1-11a

Master's student enrollment, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Computer and information sciences nec ^d	NA	NA	NA	6,664	7,504	7,449	7,265
Geosciences, atmospheric, and ocean sciences	6,006	5,629	5,327	5,277	5,520	5,186	4,793
Atmospheric sciences and meteorology	464	459	473	458	487	489	441
Geological and earth sciences	4,107	3,924	3,610	3,561	3,534	3,183	2,984
Ocean and marine sciences	1,275	1,246	1,244	1,258	1,499	1,514	1,368
Geosciences, atmospheric, and ocean sciences nec	160	ne	ne	ne	ne	ne	ne
Mathematics and statistics	16,568	18,073	19,594	18,284	20,639	20,798	20,105
Mathematics and applied mathematics ^c	10,387	11,212	11,933	11,058	13,063	13,002	12,600
Applied mathematics ^d	NA	NA	NA	6,678	8,899	9,097	8,977
Mathematics ^d	NA	NA	NA	4,380	4,164	3,905	3,623
Statistics	6,181	6,861	7,661	7,226	7,576	7,796	7,505
Multidisciplinary and interdisciplinary sciences ^c	6,923	7,414	8,203	10,980	11,994	16,931	21,928
Biological and physical sciences ^d	NA	NA	NA	993	874	899	921
Computational science ^d	NA	NA	NA	1,968	2,088	3,089	2,939
Data science and data analytics ^d	NA	NA	NA	2,124	2,358	6,000	10,243
International and global studies ^d	NA	NA	NA	1,341	1,267	1,083	865
Multidisciplinary and interdisciplinary sciences nec ^d	NA	NA	NA	4,554	5,407	5,860	6,960
Natural resources and conservation	7,311	7,691	8,066	8,793	10,012	9,807	9,486
Environmental science and studies	3,515	3,683	3,883	4,067	4,851	4,422	4,359
Forestry, natural resources, and conservation	3,796	4,008	4,183	4,726	5,161	5,385	5,127
Physical sciences	6,368	6,075	6,361	6,275	6,409	6,256	6,000
Astronomy and astrophysics	69	72	77	76	85	100	100
Chemistry	3,453	3,144	3,152	3,096	3,066	3,015	2,891
Materials sciences	448	449	539	464	439	402	373
Physics	2,182	2,173	2,164	2,141	2,278	2,253	2,179
Physical sciences nec	216	237	429	498	541	486	457
Psychology ^a	29,638	35,404	40,838	47,279	51,878	48,321	49,474
Clinical psychology	3,098	3,213	3,587	3,480	4,167	4,519	4,603
Counseling and applied psychology ^c	19,413	24,714	29,322	33,652	36,482	32,491	33,591
Applied psychology ^d	NA	NA	NA	17,673	19,517	20,091	20,430
Counseling psychology ^d	NA	NA	NA	15,979	16,965	12,400	13,161
Human development ^b	na	na	na	1,499	1,566	1,525	1,321
Psychology, general	5,905	6,178	6,357	6,826	7,329	7,346	7,321
Research and experimental psychology	1,222	1,299	1,572	1,822	2,334	2,440	2,638

TABLE 1-11a

Master's student enrollment, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Social sciences ^a	41,208	42,726	43,607	43,919	47,616	44,701	41,600
Agricultural and natural resource economics	806	779	700	603	672	485	436
Anthropology	2,363	2,302	2,233	2,167	2,292	2,173	1,971
Criminal justice and safety studies	3,869	4,506	4,917	5,674	5,602	5,223	4,942
Economics (except agricultural and natural resource)	5,238	5,427	6,084	6,114	6,882	6,734	6,398
Geography and cartography	2,696	2,717	2,660	2,745	3,147	2,807	2,517
Human development ^b	1,349	1,329	1,339	na	na	na	na
International relations and national security studies	6,755	6,826	6,657	7,322	8,308	7,833	7,147
Linguistics	1,237	1,175	1,153	1,164	1,188	1,159	1,117
Political science and government	2,979	2,706	2,897	3,072	3,270	2,925	2,649
Public policy analysis	4,718	5,882	6,297	6,352	7,290	6,701	4,645
Sociology and population studies	2,629	2,395	2,263	2,342	2,331	2,190	1,888
Social sciences, nec ^c	6,569	6,682	6,407	6,364	6,634	6,471	7,890
Area, ethnic, cultural, gender, and group studies ^d	NA	NA	NA	2,642	2,767	2,634	2,582
Criminology ^d	NA	NA	NA	1,308	1,272	1,180	1,161
Urban studies and affairs ^d	NA	NA	NA	907	827	671	648
Social sciences, other ^d	na	na	na	1,507	1,768	1,986	3,499
History and philosophy of science and technology ^e	25	31	32	na	na	na	na
Social sciences, nec ^c	6,544	6,651	6,375	na	na	na	na
Engineering	96,756	93,064	91,939	86,450	95,126	103,020	100,567
Aerospace, aeronautical, and astronautical engineering	3,322	3,342	3,701	4,326	5,065	5,263	5,380
Biological, biomedical, and biosystems engineering	4,108	4,282	4,424	4,536	5,192	5,177	5,204
Bioengineering and biomedical engineering	4,037	4,202	4,335	na	na	na	na
Biological and biosystems engineering	71	80	89	na	na	na	na
Chemical, petroleum, and chemical-related engineering	4,208	3,815	3,274	2,942	2,983	3,011	2,658
Chemical engineering	3,292	3,061	2,632	2,426	2,555	2,599	2,271
Petroleum engineering	916	754	642	516	428	412	387
Civil, environmental, transportation and related engineering fields ^c	13,506	12,729	11,873	10,819	11,730	12,621	12,082
Civil engineering ^d	13,506	12,729	11,873	8,703	9,352	9,692	9,149
Architectural, environmental, construction and surveying engineering ^d	NA	NA	NA	2,116	2,378	2,929	2,933
Electrical, electronics, communications and computer engineering	29,816	28,108	28,177	25,312	27,695	32,316	31,093
Electrical, electronics, and communications engineering ^c	29,816	28,108	28,177	16,746	17,866	19,757	18,215
Computer engineering ^d	NA	NA	NA	8,566	9,829	12,559	12,878
Industrial, manufacturing, systems engineering and operations research	12,272	12,389	11,912	11,030	11,949	12,579	11,873

TABLE 1-11a

Master's student enrollment, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Industrial and manufacturing engineering ^c	12,272	12,389	11,912	5,569	5,284	6,349	5,821
Systems engineering and operations research ^d	NA	NA	NA	5,461	6,665	6,230	6,052
Mechanical engineering	16,279	15,434	14,861	14,305	15,718	16,029	15,335
Metallurgical, mining, materials and related engineering fields	2,427	2,395	2,266	2,299	2,518	2,545	2,462
Metallurgical and materials engineering ^e	2,115	2,079	1,974	na	na	na	na
Mining engineering ^e	312	316	292	na	na	na	na
Other engineering	10,818	10,570	11,451	10,881	12,276	13,479	14,480
Agricultural engineering	505	371	494	404	519	389	377
Engineering mechanics, physics, and science	679	729	852	740	782	762	696
Nuclear engineering	444	407	418	441	484	493	516
Engineering, other	na	na	na	9,296	10,491	11,835	12,891
Engineering, nec	9,146	9,016	9,638	na	na	na	na
Nanotechnology	44	47	49	na	na	na	na
Health	52,662	56,820	56,494	60,124	65,691	66,308	61,779
Clinical medicine	25,283	27,494	26,251	29,748	34,021	33,251	28,484
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	927	1,287	1,168	1,242
Public health	24,570	26,673	25,403	28,821	32,734	32,083	27,242
Clinical medicine nec	713	821	848	ne	ne	ne	ne
Other health ^a	27,379	29,326	30,243	30,376	31,670	33,057	33,295
Communication disorders sciences	14,748	15,803	16,346	16,762	17,406	17,768	18,183
Dental sciences	1,450	1,478	1,315	1,366	1,500	1,545	1,420
Nursing science	1,550	1,902	1,861	1,488	1,662	1,535	1,701
Pharmaceutical sciences	1,078	1,075	1,187	1,619	1,939	2,142	2,265
Veterinary biomedical and clinical sciences ^b	458	637	881	na	na	na	na
Other health nec ^c	na	na	na	9,141	9,163	10,067	9,726
Kinesiology and exercise science ^d	NA	NA	NA	4,977	4,962	4,743	4,286
Other health nec ^d	8,095	8,431	8,653	4,164	4,201	5,324	5,440

na = not applicable. NA = not available (data not collected at this level of detail). ne = not eligible for graduate student reporting; the fields collected have changed over time.

nec = not elsewhere classified.

^a Broad field is not comparable between 2019 and 2020 due to changes in detailed fields.

^b Detailed field moved between broad fields between 2019 and 2020.

^c Detailed field split into multiple fields in 2020; data after 2020 represent the aggregate counts of all the new detailed fields.

^d New detailed field in 2020.

^e Code reported under a different detailed field code in 2020 and later years.

Note(s):

Percentages may not add to total because of rounding. Detailed fields under clinical medicine only list fields where graduate students can be reported. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)." Field titles match the 2020, and later titles in the few cases where field titles changed. Prior to 2020, there were no broad fields in engineering. All fields have been moved to match the current broad field organization. For information on the current fields and codes in the Survey of Graduate Students and Postdoctorates in Science and Engineering, see technical tables A-16 and A-17.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-11b

Doctoral student enrollment, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
All fields	270,525	277,096	281,889	283,335	293,543	297,223	307,229
Science	186,399	190,928	193,896	196,742	203,988	206,183	212,969
Agricultural and veterinary sciences ^a	3,744	3,880	3,889	4,313	4,443	4,647	4,854
Agricultural sciences	3,744	3,880	3,889	3,791	3,906	4,145	4,354
Veterinary biomedical and clinical sciences ^b	na	na	na	522	537	502	500
Biological and biomedical sciences ^a	51,291	52,627	53,915	54,905	58,155	59,638	60,863
Biochemistry	4,550	4,554	4,534	4,648	4,828	4,994	4,985
Biology	7,020	7,054	7,166	7,268	7,400	7,600	7,543
Biomedical sciences	3,412	4,030	4,579	4,514	4,826	5,155	5,415
Biophysics	843	830	890	860	973	887	943
Biostatistics and bioinformatics	2,679	2,946	3,192	3,339	3,591	3,799	4,043
Biotechnology	91	109	98	101	128	105	123
Botany and plant biology	1,312	1,317	1,295	1,255	1,269	1,301	1,299
Cell, cellular biology, and anatomical sciences	4,786	4,990	4,975	5,008	5,290	5,374	5,447
Ecology and population biology	2,566	2,620	2,571	2,725	2,790	2,808	2,798
Epidemiology	1,640	1,768	1,916	2,032	2,162	2,213	2,301
Genetics	2,021	2,105	2,082	2,182	2,449	2,584	2,494
Microbiological sciences and immunology	3,974	3,914	3,937	4,124	4,371	4,466	4,654
Molecular biology	1,135	1,128	1,153	1,240	1,265	1,231	1,280
Neurobiology and neuroscience	4,871	5,046	5,138	5,275	5,758	5,933	6,100
Nutrition science	988	967	948	989	993	1,050	1,109
Pathology and experimental pathology	911	880	843	753	849	917	963
Pharmacology and toxicology	2,244	2,237	2,151	2,174	2,374	2,409	2,460
Physiology	2,627	2,631	2,703	2,758	3,041	3,021	3,150
Zoology and animal biology	1,195	1,193	1,198	1,178	1,213	1,198	1,141
Biological and biomedical sciences nec	2,426	2,308	2,546	2,482	2,585	2,593	2,615
Computer and information sciences	14,291	16,127	17,192	18,174	19,531	20,583	22,484
Computer science	7,465	8,343	8,646	9,658	10,356	10,832	11,342
Computer and information sciences ^c	5,429	6,401	6,952	6,438	6,855	7,195	8,189
Computer and information sciences ^d	NA	NA	NA	5,482	6,168	6,432	7,247
Artificial intelligence, informatics, and computer and information science topics ^d	NA	NA	NA	956	687	763	942
Computer and information sciences nec ^c	1,397	1,383	1,594	2,078	2,320	2,556	2,953
Computer and information systems security ^d	NA	NA	NA	270	342	441	724
Information science and studies ^d	NA	NA	NA	1,245	1,351	1,394	1,522
Information technology ^d	NA	NA	NA	405	467	550	590

TABLE 1-11b

Doctoral student enrollment, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Computer and information sciences nec ^d	NA	NA	NA	158	160	171	117
Geosciences, atmospheric, and ocean sciences	6,539	6,704	6,551	6,515	6,770	6,784	6,801
Atmospheric sciences and meteorology	884	883	866	847	902	945	990
Geological and earth sciences	4,148	4,370	4,239	4,165	4,337	4,285	4,256
Ocean and marine sciences	1,420	1,451	1,446	1,503	1,531	1,554	1,555
Geosciences, atmospheric, and ocean sciences nec	87	ne	ne	ne	ne	ne	ne
Mathematics and statistics	13,101	13,388	13,565	13,687	13,619	13,589	13,788
Mathematics and applied mathematics ^c	10,124	10,230	10,308	10,300	10,219	10,244	10,341
Applied mathematics ^d	NA	NA	NA	2,211	2,255	2,127	2,163
Mathematics ^d	NA	NA	NA	8,089	7,964	8,117	8,178
Statistics	2,977	3,158	3,257	3,387	3,400	3,345	3,447
Multidisciplinary and interdisciplinary sciences ^c	2,931	2,924	2,978	3,553	3,774	4,014	4,501
Biological and physical sciences ^d	NA	NA	NA	815	887	956	975
Computational science ^d	NA	NA	NA	298	347	335	289
Data science and data analytics ^d	NA	NA	NA	42	46	104	173
International and global studies ^d	NA	NA	NA	173	183	175	131
Multidisciplinary and interdisciplinary sciences nec ^d	NA	NA	NA	2,225	2,311	2,444	2,933
Natural resources and conservation	3,568	3,716	3,677	3,705	3,910	3,955	4,004
Environmental science and studies	1,621	1,744	1,738	1,799	1,956	1,980	1,989
Forestry, natural resources, and conservation	1,947	1,972	1,939	1,906	1,954	1,975	2,015
Physical sciences	35,461	36,000	36,506	36,341	37,732	37,836	38,329
Astronomy and astrophysics	1,236	1,281	1,373	1,430	1,539	1,603	1,557
Chemistry	19,367	19,547	19,748	19,389	20,149	19,695	20,116
Materials sciences	927	875	1,013	1,028	1,002	1,223	1,198
Physics	13,505	13,913	13,951	13,985	14,501	14,747	14,940
Physical sciences nec	426	384	421	509	541	568	518
Psychology ^a	20,395	20,303	20,231	21,115	21,447	21,121	24,354
Clinical psychology	3,751	3,814	3,785	3,668	3,389	3,274	3,270
Counseling and applied psychology ^c	6,825	6,946	6,537	6,193	6,371	6,504	7,678
Applied psychology ^d	NA	NA	NA	4,833	4,910	5,104	4,768
Counseling psychology ^d	NA	NA	NA	1,360	1,461	1,400	2,910
Human development ^b	na	na	na	742	797	768	759
Psychology, general	7,353	6,683	6,749	6,601	6,554	5,835	7,607
Research and experimental psychology	2,466	2,860	3,160	3,911	4,336	4,740	5,040

TABLE 1-11b

Doctoral student enrollment, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Social sciences ^a	35,078	35,259	35,392	34,434	34,607	34,016	32,991
Agricultural and natural resource economics	872	919	806	639	522	416	304
Anthropology	4,562	4,471	4,365	4,296	4,129	4,047	3,825
Criminal justice and safety studies	538	663	900	988	1,227	1,390	1,482
Economics (except agricultural and natural resource)	7,831	7,917	8,045	7,959	8,266	8,201	8,161
Geography and cartography	1,856	1,849	1,741	1,652	1,729	1,547	1,320
Human development ^b	685	793	731	na	na	na	na
International relations and national security studies	398	439	413	408	474	331	326
Linguistics	1,646	1,548	1,616	1,686	1,652	1,695	1,610
Political science and government	5,609	5,611	5,488	5,366	5,332	5,310	5,035
Public policy analysis	2,234	2,320	2,414	2,547	2,740	2,690	2,725
Sociology and population studies	5,340	5,128	5,070	5,067	4,875	4,655	4,516
Social sciences, nec ^c	3,507	3,601	3,803	3,826	3,661	3,734	3,687
Area, ethnic, cultural, gender, and group studies ^d	NA	NA	NA	2,482	2,326	2,345	2,338
Criminology ^d	NA	NA	NA	318	308	322	316
Urban studies and affairs ^d	NA	NA	NA	405	391	398	318
Social sciences, other ^d	na	na	na	621	636	669	715
History and philosophy of science and technology ^e	235	270	257	na	na	na	na
Social sciences, nec ^c	3,272	3,331	3,546	na	na	na	na
Engineering	68,825	70,237	72,065	71,279	72,924	72,980	74,992
Aerospace, aeronautical, and astronautical engineering	2,386	2,506	2,554	2,645	2,773	2,832	2,884
Biological, biomedical, and biosystems engineering	7,008	7,481	7,934	8,239	8,867	9,265	9,999
Bioengineering and biomedical engineering	6,845	7,278	7,715	na	na	na	na
Biological and biosystems engineering	163	203	219	na	na	na	na
Chemical, petroleum, and chemical-related engineering	7,536	7,599	7,664	7,612	7,713	7,590	7,888
Chemical engineering	6,874	6,950	7,057	7,031	7,115	7,069	7,430
Petroleum engineering	662	649	607	581	598	521	458
Civil, environmental, transportation and related engineering fields ^c	7,626	7,732	7,752	7,485	7,878	7,754	7,852
Civil engineering ^d	7,626	7,732	7,752	6,517	6,760	6,629	6,702
Architectural, environmental, construction and surveying engineering ^d	NA	NA	NA	968	1,118	1,125	1,150
Electrical, electronics, communications and computer engineering	17,936	18,119	18,577	17,720	17,570	17,585	17,706
Electrical, electronics, and communications engineering ^c	17,936	18,119	18,577	14,694	14,767	14,780	14,773
Computer engineering ^d	NA	NA	NA	3,026	2,803	2,805	2,933
Industrial, manufacturing, systems engineering and operations research	3,633	3,598	3,762	3,839	3,921	3,856	3,889

TABLE 1-11b

Doctoral student enrollment, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Industrial and manufacturing engineering ^c	3,633	3,598	3,762	2,413	2,322	2,301	2,292
Systems engineering and operations research ^d	NA	NA	NA	1,426	1,599	1,555	1,597
Mechanical engineering	11,149	11,159	11,247	11,477	11,540	11,523	11,679
Metallurgical, mining, materials and related engineering fields	4,655	4,821	4,817	4,882	4,904	4,573	4,782
Metallurgical and materials engineering ^e	4,426	4,610	4,616	na	na	na	na
Mining engineering ^e	229	211	201	na	na	na	na
Other engineering	6,896	7,222	7,758	7,380	7,758	8,002	8,313
Agricultural engineering	681	661	662	654	668	631	655
Engineering mechanics, physics, and science	1,457	1,428	1,447	1,468	1,457	1,588	1,694
Nuclear engineering	998	1,046	1,031	1,038	1,032	1,085	1,090
Engineering, other	na	na	na	4,220	4,601	4,698	4,874
Engineering, nec	3,665	4,016	4,472	na	na	na	na
Nanotechnology	95	71	146	na	na	na	na
Health	15,301	15,931	15,928	15,314	16,631	18,060	19,268
Clinical medicine	4,410	4,508	4,571	4,796	5,612	5,966	6,174
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	443	677	954	875
Public health	4,087	4,104	4,191	4,353	4,935	5,012	5,299
Clinical medicine nec	323	404	380	ne	ne	ne	ne
Other health ^a	10,891	11,423	11,357	10,518	11,019	12,094	13,094
Communication disorders sciences	1,305	1,099	911	844	792	821	926
Dental sciences	248	247	208	217	219	228	811
Nursing science	3,598	3,551	3,439	3,359	3,512	3,657	3,809
Pharmaceutical sciences	2,566	2,954	3,121	2,893	2,936	3,059	2,954
Veterinary biomedical and clinical sciences ^b	577	575	692	na	na	na	na
Other health nec ^c	na	na	na	3,205	3,560	4,329	4,594
Kinesiology and exercise science ^d	NA	NA	NA	1,024	1,031	981	968
Other health nec ^d	2,597	2,997	2,986	2,181	2,529	3,348	3,626

na = not applicable. NA = not available (data not collected at this level of detail). ne = not eligible for graduate student reporting; the fields collected have changed over time.

nec = not elsewhere classified.

^a Broad field is not comparable between 2019 and 2020 due to changes in detailed fields.

^b Detailed field moved between broad fields between 2019 and 2020.

^c Detailed field split into multiple fields in 2020; data after 2020 represent the aggregate counts of all the new detailed fields.

^d New detailed field in 2020.

^e Code reported under a different detailed field code in 2020 and later years.

Note(s):

Percentages may not add to total because of rounding. Detailed fields under clinical medicine only list fields where graduate students can be reported. For more information on the comparability of these counts to other NCSES published data, see the ["Technical Notes."](#) Field titles match the 2020 and later titles in the few cases where field titles changed. Prior to 2020, there were no broad fields in engineering. All fields have been moved to match the current broad field organization. For information on the current fields and codes in the Survey of Graduate Students and Postdoctorates in Science and Engineering, see technical tables A-16 and A-17.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-11c

Postdoctoral appointees, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
All fields	64,733	64,783	66,247	65,681	63,328	62,750	65,850
Science	38,241	37,564	38,503	38,741	37,189	36,673	37,982
Agricultural and veterinary sciences ^a	1,024	1,072	1,079	1,678	1,595	1,705	1,993
Agricultural sciences	1,024	1,072	1,079	1,046	1,086	1,201	1,279
Veterinary biomedical and clinical sciences ^b	na	na	na	632	509	504	714
Biological and biomedical sciences ^a	21,781	21,533	21,847	21,902	20,245	19,585	19,520
Biochemistry	1,933	1,943	1,912	1,863	1,743	1,756	1,684
Biology	2,167	2,108	2,203	2,169	1,979	2,064	2,036
Biomedical sciences	1,870	1,941	1,942	1,879	1,906	1,553	1,602
Biophysics	144	151	164	147	156	126	151
Biostatistics and bioinformatics	695	699	721	830	733	691	739
Biotechnology	103	86	87	96	101	155	160
Botany and plant biology	586	620	667	579	520	507	490
Cell, cellular biology, and anatomical sciences	1,859	1,814	1,785	1,661	1,663	1,599	1,583
Ecology and population biology	468	446	414	467	430	438	461
Epidemiology	244	230	285	307	329	377	391
Genetics	1,529	1,428	1,472	1,485	1,384	1,288	1,329
Microbiological sciences and immunology	2,065	2,078	1,985	2,028	1,865	1,811	1,826
Molecular biology	477	521	570	722	634	549	507
Neurobiology and neuroscience	2,137	2,103	2,216	2,075	1,980	1,932	1,949
Nutrition science	177	180	192	191	152	146	156
Pathology and experimental pathology	1,106	1,145	1,302	1,263	1,043	925	904
Pharmacology and toxicology	1,140	1,012	1,021	1,026	884	915	886
Physiology	1,851	1,766	1,640	1,804	1,537	1,512	1,468
Zoology and animal biology	394	428	406	397	376	411	391
Biological and biomedical sciences nec	836	834	863	913	830	830	807
Computer and information sciences	854	879	878	823	880	859	987
Computer science	468	502	487	466	521	496	524
Computer and information sciences ^c	256	225	263	224	217	212	289
Computer and information sciences ^d	NA	NA	NA	187	185	166	237
Artificial intelligence, informatics, and computer and information science topics ^d	NA	NA	NA	37	32	46	52
Computer and information sciences nec ^c	130	152	128	133	142	151	174
Computer and information systems security ^d	NA	NA	NA	6	9	11	8
Information science and studies ^d	NA	NA	NA	40	56	65	66
Information technology ^d	NA	NA	NA	18	6	3	2

TABLE 1-11c

Postdoctoral appointees, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Computer and information sciences nec ^d	NA	NA	NA	69	71	72	98
Geosciences, atmospheric, and ocean sciences	2,089	1,726	1,778	1,790	1,797	1,787	1,919
Atmospheric sciences and meteorology	313	243	249	266	248	253	245
Geological and earth sciences	1,046	803	845	879	869	844	922
Ocean and marine sciences	433	401	393	360	373	414	444
Geosciences, atmospheric, and ocean sciences nec	297	279	291	285	307	276	308
Mathematics and statistics	991	982	1,070	1,076	1,112	1,110	1,220
Mathematics and applied mathematics ^c	860	833	892	924	923	910	1,016
Applied mathematics ^d	NA	NA	NA	207	202	221	203
Mathematics ^d	NA	NA	NA	717	721	689	813
Statistics	131	149	178	152	189	200	204
Multidisciplinary and interdisciplinary sciences ^c	1,131	980	972	832	878	840	988
Biological and physical sciences ^d	NA	NA	NA	119	125	56	48
Computational science ^d	NA	NA	NA	26	28	31	26
Data science and data analytics ^d	NA	NA	NA	57	50	48	98
International and global studies ^d	NA	NA	NA	13	21	27	27
Multidisciplinary and interdisciplinary sciences nec ^d	NA	NA	NA	617	654	678	789
Natural resources and conservation	731	764	806	845	889	936	937
Environmental science and studies	270	258	277	279	312	339	357
Forestry, natural resources, and conservation	461	506	529	566	577	597	580
Physical sciences	7,211	6,976	7,159	6,937	6,823	6,877	7,220
Astronomy and astrophysics	484	536	571	544	561	634	725
Chemistry	3,435	3,320	3,383	3,294	3,163	3,157	3,288
Materials sciences	300	264	259	225	213	246	247
Physics	2,645	2,619	2,721	2,676	2,677	2,618	2,723
Physical sciences nec	347	237	225	198	209	222	237
Psychology ^a	1,082	1,145	1,152	1,312	1,325	1,308	1,344
Clinical psychology	74	73	72	84	63	56	59
Counseling and applied psychology ^c	135	165	167	123	120	123	114
Applied psychology ^d	NA	NA	NA	92	110	109	105
Counseling psychology ^d	NA	NA	NA	31	10	14	9
Human development ^b	na	na	na	122	106	119	130
Psychology, general	696	674	663	722	705	735	768
Research and experimental psychology	177	233	250	261	331	275	273

TABLE 1-11c

Postdoctoral appointees, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Social sciences ^a	1,347	1,507	1,762	1,546	1,645	1,666	1,854
Agricultural and natural resource economics	57	53	52	33	42	53	72
Anthropology	136	137	148	153	149	150	152
Criminal justice and safety studies	4	12	16	17	16	15	19
Economics (except agricultural and natural resource)	94	108	132	123	165	152	147
Geography and cartography	81	120	128	140	127	131	141
Human development ^b	123	135	156	na	na	na	na
International relations and national security studies	38	51	85	68	117	98	119
Linguistics	33	39	39	41	50	58	51
Political science and government	142	137	170	148	164	162	173
Public policy analysis	162	191	220	229	213	241	305
Sociology and population studies	141	149	159	155	168	166	189
Social sciences, nec ^c	336	375	457	439	434	440	486
Area, ethnic, cultural, gender, and group studies ^d	NA	NA	NA	226	230	235	273
Criminology ^d	NA	NA	NA	2	3	8	8
Urban studies and affairs ^d	NA	NA	NA	5	10	18	7
Social sciences, other ^d	na	na	na	206	191	179	198
History and philosophy of science and technology ^e	9	12	21	na	na	na	na
Social sciences, nec ^c	327	363	436	na	na	na	na
Engineering	7,839	7,914	8,266	8,462	8,340	8,335	9,051
Aerospace, aeronautical, and astronautical engineering	196	207	227	233	277	244	254
Biological, biomedical, and biosystems engineering	1,476	1,529	1,602	1,696	1,616	1,540	1,594
Bioengineering and biomedical engineering	1,398	1,433	1,515	na	na	na	na
Biological and biosystems engineering	78	96	87	na	na	na	na
Chemical, petroleum, and chemical-related engineering	1,262	1,205	1,229	1,157	1,167	1,239	1,501
Chemical engineering	1,197	1,142	1,157	1,108	1,133	1,215	1,471
Petroleum engineering	65	63	72	49	34	24	30
Civil, environmental, transportation and related engineering fields ^c	804	739	865	1,006	968	1,018	1,070
Civil engineering ^d	804	739	865	904	879	929	960
Architectural, environmental, construction and surveying engineering ^d	NA	NA	NA	102	89	89	110
Electrical, electronics, communications and computer engineering	1,170	1,197	1,305	1,302	1,275	1,217	1,339
Electrical, electronics, and communications engineering ^c	1,170	1,197	1,305	1,242	1,186	1,129	1,257
Computer engineering ^d	NA	NA	NA	60	89	88	82
Industrial, manufacturing, systems engineering and operations research	127	156	167	194	127	143	170

TABLE 1-11c

Postdoctoral appointees, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Industrial and manufacturing engineering ^c	127	156	167	83	73	72	107
Systems engineering and operations research ^d	NA	NA	NA	111	54	71	63
Mechanical engineering	1,089	1,069	1,142	1,149	1,200	1,189	1,317
Metallurgical, mining, materials and related engineering fields	565	575	665	630	562	542	557
Metallurgical and materials engineering ^e	550	549	642	na	na	na	na
Mining engineering ^e	15	26	23	na	na	na	na
Other engineering	1,150	1,237	1,064	1,095	1,148	1,203	1,249
Agricultural engineering	111	113	112	122	112	136	154
Engineering mechanics, physics, and science	316	354	180	199	253	265	291
Nuclear engineering	94	106	80	81	99	82	103
Engineering, other	na	na	na	693	684	720	701
Engineering, nec	544	530	541	na	na	na	na
Nanotechnology	85	134	151	na	na	na	na
Health	18,653	19,305	19,478	18,478	17,799	17,742	18,817
Clinical medicine	16,100	16,563	16,650	16,287	15,561	15,630	16,393
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	430	345	450	521
Public health	767	791	843	914	880	796	848
Anesthesiology	422	436	494	466	414	313	366
Cardiology and cardiovascular disease	824	841	788	706	660	672	679
Endocrinology, diabetes, and metabolism	331	351	345	334	319	355	314
Gastroenterology	273	279	287	277	315	310	296
Hematology	338	316	434	429	362	379	354
Neurology and neurosurgery	1,202	1,437	1,466	1,491	1,522	1,618	1,715
Obstetrics and gynecology	294	313	312	289	230	218	274
Oncology and cancer research	1,974	2,012	1,830	1,541	1,504	1,391	1,512
Ophthalmology	513	517	523	456	464	476	537
Otorhinolaryngology	265	306	275	314	279	267	279
Pediatrics	1,270	1,264	1,264	1,337	1,143	1,125	1,134
Psychiatry	949	991	1,004	1,088	1,109	951	1,031
Pulmonary disease	290	286	275	296	232	238	258
Radiological sciences	996	1,090	1,152	1,180	1,100	1,218	1,359
Surgery	1,247	1,352	1,376	1,193	1,197	1,213	1,275
Clinical medicine nec	4,145	3,981	3,982	3,546	3,486	3,640	3,641
Other health ^a	2,553	2,742	2,828	2,191	2,238	2,112	2,424
Communication disorders sciences	79	83	75	82	88	72	94
Dental sciences	282	311	316	292	304	311	310

TABLE 1-11c

Postdoctoral appointees, by detailed fields: 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Nursing science	98	121	120	127	122	141	154
Pharmaceutical sciences	978	1,063	1,091	1,141	1,101	1,107	1,295
Veterinary biomedical and clinical sciences ^b	602	636	679	na	na	na	na
Other health nec ^c	na	na	na	549	623	481	571
Kinesiology and exercise science ^d	NA	NA	NA	84	67	71	83
Other health nec ^d	514	528	547	465	556	410	488

na = not applicable; NA = not available (data not collected at this level of detail).

nec = not elsewhere classified.

^a Broad field is not comparable between 2019 and 2020 due to changes in detailed fields.

^b Detailed field moved between broad fields between 2019 and 2020.

^c Detailed field split into multiple fields in 2020; data after 2020 represent the aggregate counts of all the new detailed fields.

^d New detailed field in 2020.

^e Code reported under a different detailed field code in 2020 and later years.

Note(s):

Percentages may not add to total because of rounding. Field titles match the 2020 and later titles in the few cases where field titles changed. Prior to 2020, there were no broad fields in engineering. All fields have been moved to match the current broad field organization. For information on the current fields and codes in the Survey of Graduate Students and Postdoctorates in Science and Engineering, see technical tables A-16 and A-17.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 1-11d

Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
All fields	28,180	29,284	30,349	29,661	30,548	32,279	34,342
Science	17,268	18,278	18,819	18,212	18,728	19,423	20,600
Agricultural and veterinary sciences ^a	496	565	645	964	902	1,068	1,238
Agricultural sciences	496	565	645	650	602	755	824
Veterinary biomedical and clinical sciences ^b	na	na	na	314	300	313	414
Biological and biomedical sciences ^a	8,203	8,250	8,229	8,112	8,187	8,207	8,589
Biochemistry	757	723	755	800	822	843	841
Biology	847	897	766	776	784	754	772
Biomedical sciences	533	588	622	406	419	571	571
Biophysics	46	25	36	66	77	79	79
Biostatistics and bioinformatics	357	393	400	380	338	357	366
Biotechnology	91	102	91	95	87	87	96
Botany and plant biology	228	343	314	258	230	218	227
Cell, cellular biology, and anatomical sciences	600	610	579	548	533	590	675
Ecology and population biology	242	248	183	230	250	221	236
Epidemiology	107	99	99	126	128	122	145
Genetics	510	405	501	545	591	551	557
Microbiological sciences and immunology	863	773	764	750	711	708	718
Molecular biology	133	186	233	225	239	210	222
Neurobiology and neuroscience	852	732	726	789	795	800	920
Nutrition science	113	165	136	143	137	98	100
Pathology and experimental pathology	444	398	422	401	382	308	329
Pharmacology and toxicology	436	372	377	394	433	387	358
Physiology	616	681	723	731	663	714	708
Zoology and animal biology	127	160	168	137	174	187	196
Biological and biomedical sciences nec	301	350	334	312	394	402	473
Computer and information sciences	476	515	510	458	457	507	631
Computer science	279	261	274	218	209	192	194
Computer and information sciences ^c	134	143	137	147	150	174	269
Computer and information sciences ^d	NA	NA	NA	104	111	134	217
Artificial intelligence, informatics, and computer and information science topics ^d	NA	NA	NA	43	39	40	52
Computer and information sciences nec ^c	63	111	99	93	98	141	168
Computer and information systems security ^d	NA	NA	NA	2	18	18	16
Information science and studies ^d	NA	NA	NA	21	19	30	44
Information technology ^d	NA	NA	NA	14	13	11	16

TABLE 1-11d

Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Computer and information sciences nec ^d	NA	NA	NA	56	48	82	92
Geosciences, atmospheric, and ocean sciences	1,794	2,106	2,177	2,150	2,308	2,448	2,455
Atmospheric sciences and meteorology	402	426	434	461	471	515	512
Geological and earth sciences	603	991	1,104	1,046	1,121	1,127	1,247
Ocean and marine sciences	399	365	321	330	360	385	418
Geosciences, atmospheric, and ocean sciences nec	390	324	318	313	356	421	278
Mathematics and statistics	240	266	305	201	235	251	307
Mathematics and applied mathematics ^c	195	207	226	144	176	198	241
Applied mathematics ^d	NA	NA	NA	50	66	73	99
Mathematics ^d	NA	NA	NA	94	110	125	142
Statistics	45	59	79	57	59	53	66
Multidisciplinary and interdisciplinary sciences ^c	806	832	820	679	816	931	818
Biological and physical sciences ^d	NA	NA	NA	56	38	43	42
Computational science ^d	NA	NA	NA	38	56	62	58
Data science and data analytics ^d	NA	NA	NA	22	26	32	56
International and global studies ^d	NA	NA	NA	16	14	17	15
Multidisciplinary and interdisciplinary sciences nec ^d	NA	NA	NA	547	682	777	647
Natural resources and conservation	364	580	582	573	620	605	663
Environmental science and studies	147	217	215	167	204	201	226
Forestry, natural resources, and conservation	217	363	367	406	416	404	437
Physical sciences	2,871	3,056	3,316	2,890	2,895	2,894	3,095
Astronomy and astrophysics	494	472	602	569	558	573	600
Chemistry	931	974	983	906	848	876	845
Materials sciences	82	73	64	73	64	77	69
Physics	1,306	1,354	1,458	1,151	1,235	1,162	1,210
Physical sciences nec	58	183	209	191	190	206	371
Psychology ^a	494	507	576	749	803	786	950
Clinical psychology	40	9	11	16	23	9	20
Counseling and applied psychology ^c	47	38	120	90	75	81	126
Applied psychology ^d	NA	NA	NA	64	60	70	118
Counseling psychology ^d	NA	NA	NA	26	15	11	8
Human development ^b	na	na	na	137	110	148	158
Psychology, general	247	302	328	348	389	417	472
Research and experimental psychology	160	158	117	158	206	131	174

TABLE 1-11d

Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Social sciences ^a	1,524	1,601	1,659	1,436	1,505	1,726	1,854
Agricultural and natural resource economics	44	62	51	52	41	31	51
Anthropology	85	76	99	81	79	74	70
Criminal justice and safety studies	5	10	13	12	8	21	22
Economics (except agricultural and natural resource)	166	156	155	176	164	152	152
Geography and cartography	98	105	110	103	106	100	118
Human development ^b	160	130	164	na	na	na	na
International relations and national security studies	45	59	50	51	76	92	139
Linguistics	46	37	29	39	40	55	59
Political science and government	72	72	83	64	74	87	93
Public policy analysis	292	311	337	361	358	468	475
Sociology and population studies	143	154	164	148	145	168	196
Social sciences, nec ^c	368	429	404	349	414	478	479
Area, ethnic, cultural, gender, and group studies ^d	NA	NA	NA	134	122	96	143
Criminology ^d	NA	NA	NA	7	11	15	10
Urban studies and affairs ^d	NA	NA	NA	18	28	37	21
Social sciences, other ^d	na	na	na	190	253	330	305
History and philosophy of science and technology ^e	9	1	3	na	na	na	na
Social sciences, nec ^c	359	428	401	na	na	na	na
Engineering	3,274	3,570	3,909	3,921	3,992	4,355	4,575
Aerospace, aeronautical, and astronautical engineering	102	115	124	149	144	153	166
Biological, biomedical, and biosystems engineering	451	491	545	525	589	685	674
Bioengineering and biomedical engineering	415	440	492	na	na	na	na
Biological and biosystems engineering	36	51	53	na	na	na	na
Chemical, petroleum, and chemical-related engineering	340	337	410	330	307	313	349
Chemical engineering	281	257	328	274	257	265	303
Petroleum engineering	59	80	82	56	50	48	46
Civil, environmental, transportation and related engineering fields ^c	422	414	492	488	479	569	654
Civil engineering ^d	422	414	492	451	446	497	571
Architectural, environmental, construction and surveying engineering ^d	NA	NA	NA	37	33	72	83
Electrical, electronics, communications and computer engineering	557	588	637	706	755	734	799
Electrical, electronics, and communications engineering ^c	557	588	637	647	684	673	731
Computer engineering ^d	NA	NA	NA	59	71	61	68
Industrial, manufacturing, systems engineering and operations research	119	105	137	155	107	197	221

TABLE 1-11d

Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Industrial and manufacturing engineering ^c	119	105	137	53	53	74	83
Systems engineering and operations research ^d	NA	NA	NA	102	54	123	138
Mechanical engineering	458	489	531	469	529	527	560
Metallurgical, mining, materials and related engineering fields	233	267	303	299	259	280	249
Metallurgical and materials engineering ^e	181	215	242	na	na	na	na
Mining engineering ^e	52	52	61	na	na	na	na
Other engineering	592	764	730	800	823	897	903
Agricultural engineering	52	60	55	54	55	48	53
Engineering mechanics, physics, and science	200	220	186	177	193	199	190
Nuclear engineering	22	41	41	45	40	41	35
Engineering, other	na	na	na	524	535	609	625
Engineering, nec	285	400	372	na	na	na	na
Nanotechnology	33	43	76	na	na	na	na
Health	7,638	7,436	7,621	7,528	7,828	8,501	9,167
Clinical medicine	6,448	6,159	6,273	6,500	6,751	7,351	7,798
Medical clinical sciences and clinical and medical laboratory sciences	NA	NA	NA	167	134	128	477
Public health	611	646	687	616	656	742	911
Anesthesiology	147	139	155	122	108	129	129
Cardiology and cardiovascular disease	248	238	200	182	215	227	228
Endocrinology, diabetes, and metabolism	98	102	107	91	103	109	122
Gastroenterology	96	92	98	96	112	105	89
Hematology	111	114	160	164	180	199	168
Neurology and neurosurgery	493	425	496	469	527	580	533
Obstetrics and gynecology	117	94	104	93	106	107	121
Oncology and cancer research	620	637	630	644	549	648	587
Ophthalmology	377	297	261	287	259	303	295
Otorhinolaryngology	116	142	121	125	119	119	148
Pediatrics	657	624	597	643	632	742	743
Psychiatry	236	235	241	307	279	351	346
Pulmonary disease	144	136	107	119	100	116	118
Radiological sciences	395	436	391	401	381	444	465
Surgery	505	523	527	507	561	572	608
Clinical medicine nec	1,477	1,279	1,391	1,467	1,730	1,730	1,710
Other health ^a	1,190	1,277	1,348	1,028	1,077	1,150	1,369
Communication disorders sciences	66	68	46	49	83	86	85
Dental sciences	78	92	110	103	123	140	159

TABLE 1-11d

Doctorate holding nonfaculty researcher counts, by detailed field, aligned to the 2020 broad fields, 2017–23

(Number)

Detailed field	2017	2018	2019	2020	2021	2022	2023
Nursing science	101	96	97	103	117	166	187
Pharmaceutical sciences	368	344	392	377	372	379	469
Veterinary biomedical and clinical sciences ^b	260	330	290	na	na	na	na
Other health nec ^c	na	na	na	396	382	379	469
Kinesiology and exercise science ^d	NA	NA	NA	46	31	49	50
Other health nec ^d	317	347	413	350	351	330	419

na = not applicable; NA = not available (data not collected at this level of detail).

nec = not elsewhere classified.

^a Broad field is not comparable between 2019 and 2020 due to changes in detailed fields.

^b Detailed field moved between broad fields between 2019 and 2020.

^c Detailed field split into multiple fields in 2020; data after 2020 represent the aggregate counts of all the new detailed fields.

^d New detailed field in 2020.

^e Code reported under a different detailed field code in 2020 and later years.

Note(s):

Percentages may not add to total because of rounding. Field titles match the 2020 and later titles in the few cases where field titles changed. Prior to 2020, there were no broad fields in engineering. All fields have been moved to match the current broad field organization. For information on the current of fields and codes in the Survey of Graduate Students and Postdoctorates in Science and Engineering, see [technical tables A-16 and A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE 2-1

Demographic characteristics of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 2023

(Number and percent)

Sex, citizenship, ethnicity, and race	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent				
All individuals	818,095	100.0	510,866	100.0	307,229	100.0	65,850	100.0	34,342	100.0
Male	422,321	51.6	258,675	50.6	163,646	53.3	37,458	56.9	19,495	56.8
Female	395,774	48.4	252,191	49.4	143,583	46.7	28,392	43.1	14,847	43.2
U.S. citizens and permanent residents ^a	495,808	60.6	313,609	61.4	182,199	59.3	27,701	42.1	na	na
Hispanic or Latino	70,428	8.6	48,099	9.4	22,329	7.3	2,352	3.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,984	0.2	1,211	0.2	773	0.3	111	0.2	na	na
Asian	62,549	7.6	40,930	8.0	21,619	7.0	5,631	8.6	na	na
Black or African American	46,276	5.7	31,764	6.2	14,512	4.7	1,230	1.9	na	na
Native Hawaiian or Other Pacific Islander	754	0.1	544	0.1	210	0.1	57	0.1	na	na
White	269,477	32.9	163,247	32.0	106,230	34.6	14,585	22.1	na	na
More than one race	20,004	2.4	12,120	2.4	7,884	2.6	694	1.1	na	na
Unknown ethnicity and race	24,336	3.0	15,694	3.1	8,642	2.8	3,041	4.6	na	na
Temporary visa holders	322,287	39.4	197,257	38.6	125,030	40.7	38,149	57.9	na	na
Male										
U.S. citizens and permanent residents ^a	224,284	27.4	137,740	27.0	86,544	28.2	14,321	21.7	na	na
Hispanic or Latino	29,552	3.6	19,304	3.8	10,248	3.3	1,106	1.7	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	759	0.1	459	0.1	300	0.1	50	0.1	na	na
Asian	31,363	3.8	20,645	4.0	10,718	3.5	3,137	4.8	na	na
Black or African American	16,945	2.1	11,554	2.3	5,391	1.8	520	0.8	na	na
Native Hawaiian or Other Pacific Islander	336	*	239	*	97	*	30	*	na	na
White	124,903	15.3	72,848	14.3	52,055	16.9	7,535	11.4	na	na
More than one race	8,779	1.1	5,289	1.0	3,490	1.1	323	0.5	na	na
Unknown ethnicity and race	11,647	1.4	7,402	1.4	4,245	1.4	1,620	2.5	na	na
Temporary visa holders	198,037	24.2	120,935	23.7	77,102	25.1	23,137	35.1	na	na
Female										
U.S. citizens and permanent residents ^a	271,524	33.2	175,869	34.4	95,655	31.1	13,380	20.3	na	na
Hispanic or Latino	40,876	5.0	28,795	5.6	12,081	3.9	1,246	1.9	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,225	0.1	752	0.1	473	0.2	61	0.1	na	na
Asian	31,186	3.8	20,285	4.0	10,901	3.5	2,494	3.8	na	na
Black or African American	29,331	3.6	20,210	4.0	9,121	3.0	710	1.1	na	na
Native Hawaiian or Other Pacific Islander	418	0.1	305	0.1	113	*	27	*	na	na

TABLE 2-1

Demographic characteristics of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health: 2023

(Number and percent)

Sex, citizenship, ethnicity, and race	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent				
White	144,574	17.7	90,399	17.7	54,175	17.6	7,050	10.7	na	na
More than one race	11,225	1.4	6,831	1.3	4,394	1.4	371	0.6	na	na
Unknown ethnicity and race	12,689	1.6	8,292	1.6	4,397	1.4	1,421	2.2	na	na
Temporary visa holders	124,250	15.2	76,322	14.9	47,928	15.6	15,012	22.8	na	na

* = value < 0.05%. na = not applicable; citizenship and race and ethnicity data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

Note(s):

Percentages may not add to total because of rounding. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
All surveyed fields	818,095	48.4	510,866	49.4	307,229	46.7	65,850	43.1	34,342	43.2
U.S. citizens and permanent residents ^a	495,808	54.8	313,609	56.1	182,199	52.5	27,701	48.3	na	na
Hispanic or Latino	70,428	58.0	48,099	59.9	22,329	54.1	2,352	53.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,984	61.7	1,211	62.1	773	61.2	111	55.0	na	na
Asian	62,549	49.9	40,930	49.6	21,619	50.4	5,631	44.3	na	na
Black or African American	46,276	63.4	31,764	63.6	14,512	62.9	1,230	57.7	na	na
Native Hawaiian or Other Pacific Islander	754	55.4	544	56.1	210	53.8	57	47.4	na	na
White	269,477	53.6	163,247	55.4	106,230	51.0	14,585	48.3	na	na
More than one race	20,004	56.1	12,120	56.4	7,884	55.7	694	53.5	na	na
Unknown ethnicity and race	24,336	52.1	15,694	52.8	8,642	50.9	3,041	46.7	na	na
Temporary visa holders	322,287	38.6	197,257	38.7	125,030	38.3	38,149	39.4	na	na
Science	561,489	50.6	348,520	50.5	212,969	50.6	37,982	42.9	20,600	42.4
U.S. citizens and permanent residents ^a	342,026	56.1	206,723	56.8	135,303	54.9	16,635	47.4	na	na
Hispanic or Latino	49,494	60.1	32,310	62.0	17,184	56.5	1,466	53.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,412	60.8	808	60.0	604	61.8	69	53.6	na	na
Asian	41,873	50.7	26,885	49.3	14,988	53.3	2,992	42.9	na	na
Black or African American	32,482	63.5	22,048	63.3	10,434	64.0	646	54.3	na	na
Native Hawaiian or Other Pacific Islander	572	54.7	413	53.8	159	57.2	28	57.1	na	na
White	185,527	55.0	105,997	56.3	79,530	53.4	9,301	47.8	na	na
More than one race	13,966	58.3	7,998	57.9	5,968	58.9	458	50.7	na	na
Unknown ethnicity and race	16,700	52.3	10,264	51.4	6,436	53.7	1,675	43.7	na	na
Temporary visa holders	219,463	42.0	141,797	41.3	77,666	43.2	21,347	39.3	na	na
Agricultural and veterinary sciences	11,755	59.6	6,901	63.0	4,854	54.9	1,993	48.9	1,238	49.5
U.S. citizens and permanent residents ^a	7,684	64.2	5,291	65.9	2,393	60.3	825	59.4	na	na
Hispanic or Latino	896	64.5	653	67.2	243	57.2	55	72.7	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	41	68.3	27	85.2	14	35.7	2	100.0	na	na
Asian	372	61.6	236	67.8	136	50.7	126	49.2	na	na
Black or African American	422	65.4	323	65.3	99	65.7	60	50.0	na	na
Native Hawaiian or Other Pacific Islander	17	58.8	16	56.3	1	100.0	1	100.0	na	na
White	5,457	64.0	3,702	65.4	1,755	61.0	489	64.8	na	na
More than one race	244	66.0	169	64.5	75	69.3	22	45.5	na	na

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female	Total number	Percent female
Unknown ethnicity and race	235	66.8	165	70.3	70	58.6	70	40.0	na	na
Temporary visa holders	4,071	51.1	1,610	53.4	2,461	49.6	1,168	41.4	na	na
Biological and biomedical sciences	105,566	62.6	44,703	67.4	60,863	59.1	19,520	47.5	8,589	47.4
U.S. citizens and permanent residents ^a	79,320	63.3	35,639	67.6	43,681	59.8	8,098	50.5	na	na
Hispanic or Latino	11,037	62.7	5,086	67.8	5,951	58.4	776	56.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	284	63.0	125	69.6	159	57.9	30	63.3	na	na
Asian	10,603	62.3	4,966	66.7	5,637	58.5	1,587	46.5	na	na
Black or African American	6,510	70.8	3,905	73.6	2,605	66.5	301	54.2	na	na
Native Hawaiian or Other Pacific Islander	112	64.3	61	62.3	51	66.7	13	53.8	na	na
White	44,088	62.6	18,362	66.7	25,726	59.7	4,448	50.8	na	na
More than one race	3,444	63.8	1,525	67.3	1,919	61.0	219	53.0	na	na
Unknown ethnicity and race	3,242	63.0	1,609	66.7	1,633	59.3	724	48.2	na	na
Temporary visa holders	26,246	60.6	9,064	66.7	17,182	57.4	11,422	45.5	na	na
Computer and information sciences	166,014	33.1	143,530	33.9	22,484	28.4	987	27.9	631	27.4
U.S. citizens and permanent residents ^a	57,659	29.7	49,046	29.8	8,613	29.3	374	33.2	na	na
Hispanic or Latino	6,059	28.4	5,425	28.4	634	29.2	19	42.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	168	29.2	141	29.1	27	29.6	1	100.0	na	na
Asian	14,432	33.4	12,577	33.5	1,855	32.4	81	37.0	na	na
Black or African American	6,351	38.2	5,529	38.7	822	34.8	18	50.0	na	na
Native Hawaiian or Other Pacific Islander	87	27.6	75	24.0	12	50.0	2	100.0	na	na
White	24,437	25.4	20,179	25.3	4,258	25.8	198	30.3	na	na
More than one race	2,166	30.0	1,784	29.0	382	34.3	6	33.3	na	na
Unknown ethnicity and race	3,959	31.2	3,336	30.7	623	33.9	49	24.5	na	na
Temporary visa holders	108,355	34.9	94,484	36.0	13,871	27.8	613	24.6	na	na
Geosciences, atmospheric, and ocean sciences	11,594	52.4	4,793	54.5	6,801	50.9	1,919	41.6	2,455	34.7
U.S. citizens and permanent residents ^a	8,851	56.1	4,209	56.4	4,642	55.8	931	47.6	na	na
Hispanic or Latino	1,132	57.7	582	59.6	550	55.6	79	44.3	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	29	72.4	19	68.4	10	80.0	3	66.7	na	na
Asian	415	58.8	159	60.4	256	57.8	105	47.6	na	na
Black or African American	311	56.9	143	58.7	168	55.4	30	46.7	na	na
Native Hawaiian or Other Pacific Islander	5	80.0	3	66.7	2	100.0	1	100.0	na	na

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
White	6,201	55.3	2,985	55.5	3,216	55.2	582	48.3	na	na
More than one race	454	62.1	189	58.7	265	64.5	31	58.1	na	na
Unknown ethnicity and race	304	49.3	129	49.6	175	49.1	100	42.0	na	na
Temporary visa holders	2,743	40.5	584	41.1	2,159	40.3	988	36.0	na	na
Mathematics and statistics	33,893	35.3	20,105	38.9	13,788	30.0	1,220	23.4	307	30.3
U.S. citizens and permanent residents ^a	15,831	33.4	9,086	37.5	6,745	27.9	604	24.0	na	na
Hispanic or Latino	1,958	33.1	1,250	36.6	708	26.8	45	17.8	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	38	31.6	27	25.9	11	45.5	5	20.0	na	na
Asian	2,563	37.8	1,553	42.2	1,010	31.0	123	28.5	na	na
Black or African American	768	41.1	548	44.2	220	33.6	13	23.1	na	na
Native Hawaiian or Other Pacific Islander	15	20.0	11	18.2	4	25.0	1	*	na	na
White	9,075	31.7	4,917	36.0	4,158	26.7	319	23.5	na	na
More than one race	595	33.9	321	35.8	274	31.8	20	30.0	na	na
Unknown ethnicity and race	819	32.0	459	34.4	360	28.9	78	21.8	na	na
Temporary visa holders	18,062	36.9	11,019	40.1	7,043	31.9	616	22.9	na	na
Multidisciplinary and interdisciplinary sciences	26,429	49.4	21,928	48.2	4,501	55.2	988	44.1	818	39.2
U.S. citizens and permanent residents ^a	14,972	53.3	12,064	52.2	2,908	58.1	490	53.1	na	na
Hispanic or Latino	1,935	54.7	1,596	53.5	339	60.5	48	54.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	43	51.2	33	48.5	10	60.0	1	100.0	na	na
Asian	2,392	53.8	2,071	52.1	321	64.8	81	49.4	na	na
Black or African American	1,458	58.4	1,206	57.9	252	60.7	21	57.1	na	na
Native Hawaiian or Other Pacific Islander	25	60.0	20	50.0	5	100.0	4	50.0	na	na
White	7,814	52.3	6,085	51.1	1,729	56.4	260	55.0	na	na
More than one race	574	56.4	448	55.6	126	59.5	14	57.1	na	na
Unknown ethnicity and race	731	47.1	605	46.4	126	50.0	61	45.9	na	na
Temporary visa holders	11,457	44.2	9,864	43.2	1,593	49.9	498	35.3	na	na
Natural resources and conservation	13,490	59.7	9,486	60.4	4,004	57.9	937	47.2	663	40.3
U.S. citizens and permanent residents ^a	11,139	61.3	8,309	61.5	2,830	60.9	557	52.2	na	na
Hispanic or Latino	1,240	66.5	953	66.8	287	65.2	33	48.5	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	120	66.7	76	65.8	44	68.2	2	*	na	na
Asian	448	67.9	295	69.2	153	65.4	49	46.9	na	na

TABLE 2-2a

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
American Indian or Alaska Native	340	63.8	165	60.6	175	66.9	14	57.1	na	na
Asian	3,761	61.3	2,066	62.1	1,695	60.2	144	54.2	na	na
Black or African American	6,300	63.6	4,051	65.0	2,249	61.0	91	63.7	na	na
Native Hawaiian or Other Pacific Islander	113	48.7	78	48.7	35	48.6	4	75.0	na	na
White	29,079	53.9	17,738	53.7	11,341	54.1	591	54.3	na	na
More than one race	2,220	63.1	1,322	61.8	898	64.9	37	67.6	na	na
Unknown ethnicity and race	2,516	48.8	1,314	47.2	1,202	50.5	147	63.3	na	na
Temporary visa holders	22,091	50.4	9,313	54.0	12,778	47.7	696	47.7	na	na

- = not calculable. * = value < 0.05%. na = not applicable; citizenship and race and ethnicity data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
All surveyed fields	818,095	48.4	510,866	49.4	307,229	46.7	65,850	43.1	34,342	43.2
U.S. citizens and permanent residents ^a	495,808	54.8	313,609	56.1	182,199	52.5	27,701	48.3	na	na
Hispanic or Latino	70,428	58.0	48,099	59.9	22,329	54.1	2,352	53.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,984	61.7	1,211	62.1	773	61.2	111	55.0	na	na
Asian	62,549	49.9	40,930	49.6	21,619	50.4	5,631	44.3	na	na
Black or African American	46,276	63.4	31,764	63.6	14,512	62.9	1,230	57.7	na	na
Native Hawaiian or Other Pacific Islander	754	55.4	544	56.1	210	53.8	57	47.4	na	na
White	269,477	53.6	163,247	55.4	106,230	51.0	14,585	48.3	na	na
More than one race	20,004	56.1	12,120	56.4	7,884	55.7	694	53.5	na	na
Unknown ethnicity and race	24,336	52.1	15,694	52.8	8,642	50.9	3,041	46.7	na	na
Temporary visa holders	322,287	38.6	197,257	38.7	125,030	38.3	38,149	39.4	na	na
Engineering	175,559	28.2	100,567	26.9	74,992	29.9	9,051	28.0	4,575	24.3
U.S. citizens and permanent residents ^a	83,469	29.1	51,528	26.5	31,941	33.3	2,916	33.1	na	na
Hispanic or Latino	10,604	29.0	7,204	26.7	3,400	33.9	202	37.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	221	35.3	138	33.3	83	38.6	13	30.8	na	na
Asian	13,441	33.3	8,305	31.1	5,136	37.0	790	27.2	na	na
Black or African American	4,730	34.1	2,894	30.5	1,836	39.7	102	49.0	na	na
Native Hawaiian or Other Pacific Islander	80	35.0	50	36.0	30	33.3	1	100.0	na	na
White	46,915	27.2	28,366	24.5	18,549	31.3	1,396	33.4	na	na
More than one race	3,628	33.2	2,191	30.6	1,437	37.2	79	51.9	na	na
Unknown ethnicity and race	3,850	27.4	2,380	25.2	1,470	31.1	333	34.2	na	na
Temporary visa holders	92,090	27.3	49,039	27.3	43,051	27.3	6,135	25.5	na	na
Aerospace, aeronautical, and astronautical engineering	8,264	19.9	5,380	19.9	2,884	19.9	254	18.5	166	17.5
U.S. citizens and permanent residents ^a	6,227	19.4	4,422	19.0	1,805	20.6	80	21.3	na	na
Hispanic or Latino	778	18.6	588	19.7	190	15.3	2	*	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	13	23.1	7	14.3	6	33.3	0	-	na	na
Asian	907	21.6	669	21.5	238	21.8	18	5.6	na	na
Black or African American	181	22.7	117	17.9	64	31.3	1	*	na	na
Native Hawaiian or Other Pacific Islander	8	25.0	6	16.7	2	50.0	0	-	na	na
White	3,873	18.7	2,712	18.0	1,161	20.2	48	27.1	na	na
More than one race	289	25.3	193	25.4	96	25.0	2	*	na	na

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
Unknown ethnicity and race	178	15.2	130	14.6	48	16.7	9	33.3	na	na
Temporary visa holders	2,037	21.3	958	23.9	1,079	18.9	174	17.2	na	na
Biological, biomedical, and biosystems engineering	15,203	48.8	5,204	50.4	9,999	47.9	1,594	39.5	674	40.2
U.S. citizens and permanent residents ^a	9,624	49.5	3,395	49.4	6,229	49.5	667	42.3	na	na
Hispanic or Latino	1,220	49.4	459	49.5	761	49.4	59	45.8	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	20	40.0	8	37.5	12	41.7	1	100.0	na	na
Asian	1,972	49.1	770	50.0	1,202	48.6	162	35.8	na	na
Black or African American	587	56.2	225	57.3	362	55.5	23	47.8	na	na
Native Hawaiian or Other Pacific Islander	9	33.3	3	33.3	6	33.3	1	100.0	na	na
White	4,942	48.7	1,663	47.4	3,279	49.4	329	42.9	na	na
More than one race	440	53.0	156	58.3	284	50.0	18	55.6	na	na
Unknown ethnicity and race	434	47.5	111	47.7	323	47.4	74	44.6	na	na
Temporary visa holders	5,579	47.6	1,809	52.1	3,770	45.4	927	37.5	na	na
Chemical, petroleum, and chemical-related engineering	10,546	34.6	2,658	31.6	7,888	35.6	1,501	28.2	349	25.8
U.S. citizens and permanent residents ^a	4,899	36.0	1,350	33.0	3,549	37.1	437	31.8	na	na
Hispanic or Latino	520	36.2	165	33.3	355	37.5	29	27.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	11	36.4	3	*	8	50.0	0	-	na	na
Asian	920	42.5	277	41.5	643	42.9	124	25.8	na	na
Black or African American	222	44.1	65	38.5	157	46.5	15	46.7	na	na
Native Hawaiian or Other Pacific Islander	5	60.0	2	100.0	3	33.3	0	-	na	na
White	2,846	33.5	723	28.8	2,123	35.1	211	32.2	na	na
More than one race	192	31.8	54	33.3	138	31.2	16	62.5	na	na
Unknown ethnicity and race	183	35.5	61	37.7	122	34.4	42	33.3	na	na
Temporary visa holders	5,647	33.4	1,308	30.2	4,339	34.4	1,064	26.7	na	na
Civil, environmental, transportation and related engineering fields	19,934	33.6	12,082	32.8	7,852	34.9	1,070	33.0	654	25.7
U.S. citizens and permanent residents ^a	8,993	39.2	6,588	37.0	2,405	45.3	321	42.1	na	na
Hispanic or Latino	1,353	39.1	1,081	35.7	272	52.6	20	60.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	54	33.3	39	35.9	15	26.7	2	*	na	na
Asian	1,063	42.1	766	41.3	297	44.1	76	34.2	na	na
Black or African American	500	37.2	338	33.1	162	45.7	9	66.7	na	na
Native Hawaiian or Other Pacific Islander	14	50.0	8	62.5	6	33.3	0	-	na	na

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
White	5,331	38.5	3,889	36.5	1,442	43.8	153	40.5	na	na
More than one race	360	47.5	254	44.9	106	53.8	10	70.0	na	na
Unknown ethnicity and race	318	35.8	213	31.9	105	43.8	51	43.1	na	na
Temporary visa holders	10,941	29.0	5,494	27.8	5,447	30.3	749	29.1	na	na
Electrical, electronics, communications and computer engineering	48,799	23.6	31,093	24.9	17,706	21.3	1,339	21.4	799	16.9
U.S. citizens and permanent residents ^a	17,263	18.3	11,853	17.6	5,410	19.9	393	25.2	na	na
Hispanic or Latino	2,124	15.9	1,617	15.0	507	18.9	21	14.3	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	31	25.8	25	32.0	6	*	1	*	na	na
Asian	3,692	24.2	2,610	24.2	1,082	24.3	108	23.1	na	na
Black or African American	1,067	21.2	756	20.1	311	23.8	10	40.0	na	na
Native Hawaiian or Other Pacific Islander	18	22.2	13	30.8	5	*	0	-	na	na
White	8,610	15.2	5,657	14.4	2,953	16.7	185	28.1	na	na
More than one race	752	22.5	512	19.3	240	29.2	13	38.5	na	na
Unknown ethnicity and race	969	22.5	663	20.8	306	26.1	55	18.2	na	na
Temporary visa holders	31,536	26.4	19,240	29.3	12,296	21.9	946	19.9	na	na
Industrial, manufacturing, systems engineering and operations research	15,762	29.2	11,873	28.0	3,889	33.1	170	28.2	221	26.2
U.S. citizens and permanent residents ^a	7,498	30.8	6,012	30.3	1,486	32.6	55	38.2	na	na
Hispanic or Latino	1,121	34.2	1,006	33.9	115	36.5	0	-	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	13	46.2	10	50.0	3	33.3	0	-	na	na
Asian	970	36.5	756	36.6	214	36.0	11	36.4	na	na
Black or African American	542	35.4	391	34.3	151	38.4	2	50.0	na	na
Native Hawaiian or Other Pacific Islander	4	25.0	3	33.3	1	*	0	-	na	na
White	4,084	28.3	3,220	27.6	864	30.9	30	40.0	na	na
More than one race	280	36.1	222	34.7	58	41.4	2	50.0	na	na
Unknown ethnicity and race	484	24.0	404	24.8	80	20.0	10	30.0	na	na
Temporary visa holders	8,264	27.8	5,861	25.6	2,403	33.4	115	23.5	na	na
Mechanical engineering	27,014	18.8	15,335	16.6	11,679	21.5	1,317	19.1	560	16.8
U.S. citizens and permanent residents ^a	13,744	21.3	9,017	19.1	4,727	25.4	381	21.5	na	na
Hispanic or Latino	1,839	20.2	1,288	18.1	551	25.2	29	17.2	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	33	33.3	21	28.6	12	41.7	4	*	na	na
Asian	2,045	26.2	1,389	23.8	656	31.3	122	18.9	na	na

TABLE 2-2b

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in engineering, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
Black or African American	586	26.6	365	22.2	221	33.9	14	42.9	na	na
Native Hawaiian or Other Pacific Islander	11	27.3	9	22.2	2	50.0	0	-	na	na
White	8,051	19.6	5,193	17.6	2,858	23.2	169	18.9	na	na
More than one race	673	25.9	450	22.4	223	32.7	5	60.0	na	na
Unknown ethnicity and race	506	19.8	302	20.2	204	19.1	38	34.2	na	na
Temporary visa holders	13,270	16.1	6,318	13.1	6,952	18.9	936	18.2	na	na
Metallurgical, mining, materials and related engineering fields	7,244	31.6	2,462	31.3	4,782	31.8	557	23.2	249	19.3
U.S. citizens and permanent residents ^a	3,928	33.9	1,560	34.0	2,368	33.9	150	26.7	na	na
Hispanic or Latino	521	32.1	219	37.0	302	28.5	7	28.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	12	41.7	6	50.0	6	33.3	3	100.0	na	na
Asian	545	37.2	200	32.5	345	40.0	40	22.5	na	na
Black or African American	181	41.4	74	41.9	107	41.1	4	75.0	na	na
Native Hawaiian or Other Pacific Islander	3	66.7	2	50.0	1	100.0	0	-	na	na
White	2,338	32.9	918	33.2	1,420	32.7	72	25.0	na	na
More than one race	186	34.4	70	31.4	116	36.2	5	20.0	na	na
Unknown ethnicity and race	142	33.1	71	31.0	71	35.2	19	21.1	na	na
Temporary visa holders	3,316	28.9	902	26.7	2,414	29.7	407	21.9	na	na
Other engineering	22,793	28.9	14,480	29.0	8,313	28.8	1,249	29.1	903	24.4
U.S. citizens and permanent residents ^a	11,293	29.4	7,331	28.8	3,962	30.4	432	35.0	na	na
Hispanic or Latino	1,128	31.1	781	31.1	347	31.1	35	51.4	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	34	44.1	19	31.6	15	60.0	2	*	na	na
Asian	1,327	37.2	868	37.0	459	37.5	129	28.7	na	na
Black or African American	864	35.8	563	35.3	301	36.5	24	50.0	na	na
Native Hawaiian or Other Pacific Islander	8	37.5	4	25.0	4	50.0	0	-	na	na
White	6,840	26.7	4,391	25.7	2,449	28.4	199	34.2	na	na
More than one race	456	34.9	280	35.4	176	34.1	8	50.0	na	na
Unknown ethnicity and race	636	25.6	425	27.1	211	22.7	35	34.3	na	na
Temporary visa holders	11,500	28.5	7,149	29.2	4,351	27.4	817	25.9	na	na

- = not calculable. * = value < 0.05%. na = not applicable; citizenship and race and ethnicity data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 2-2c

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in health, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
All surveyed fields	818,095	48.4	510,866	49.4	307,229	46.7	65,850	43.1	34,342	43.2
U.S. citizens and permanent residents ^a	495,808	54.8	313,609	56.1	182,199	52.5	27,701	48.3	na	na
Hispanic or Latino	70,428	58.0	48,099	59.9	22,329	54.1	2,352	53.0	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,984	61.7	1,211	62.1	773	61.2	111	55.0	na	na
Asian	62,549	49.9	40,930	49.6	21,619	50.4	5,631	44.3	na	na
Black or African American	46,276	63.4	31,764	63.6	14,512	62.9	1,230	57.7	na	na
Native Hawaiian or Other Pacific Islander	754	55.4	544	56.1	210	53.8	57	47.4	na	na
White	269,477	53.6	163,247	55.4	106,230	51.0	14,585	48.3	na	na
More than one race	20,004	56.1	12,120	56.4	7,884	55.7	694	53.5	na	na
Unknown ethnicity and race	24,336	52.1	15,694	52.8	8,642	50.9	3,041	46.7	na	na
Temporary visa holders	322,287	38.6	197,257	38.7	125,030	38.3	38,149	39.4	na	na
Health	81,047	77.0	61,779	79.4	19,268	69.3	18,817	50.9	9,167	54.6
U.S. citizens and permanent residents ^a	70,313	78.9	55,358	80.8	14,955	71.8	8,150	55.6	na	na
Hispanic or Latino	10,330	78.1	8,585	79.7	1,745	70.2	684	56.3	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	351	82.3	265	83.4	86	79.1	29	69.0	na	na
Asian	7,235	75.4	5,740	77.4	1,495	67.9	1,849	53.8	na	na
Black or African American	9,064	78.2	6,822	78.8	2,242	76.3	482	64.1	na	na
Native Hawaiian or Other Pacific Islander	102	75.5	81	80.2	21	57.1	28	35.7	na	na
White	37,035	80.2	28,884	82.4	8,151	72.2	3,888	55.0	na	na
More than one race	2,410	77.9	1,931	79.4	479	71.8	157	62.4	na	na
Unknown ethnicity and race	3,786	76.8	3,050	79.4	736	66.0	1,033	55.7	na	na
Temporary visa holders	10,734	64.7	6,421	67.4	4,313	60.5	10,667	47.3	na	na
Clinical medicine ^b	34,658	76.1	28,484	77.0	6,174	71.9	16,393	50.6	7,798	54.2
U.S. citizens and permanent residents ^a	30,630	77.2	25,710	77.9	4,920	73.9	6,905	55.0	na	na
Hispanic or Latino	4,538	76.4	3,867	77.1	671	72.3	604	56.1	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	226	83.6	173	84.4	53	81.1	25	64.0	na	na
Asian	3,953	75.5	3,400	76.6	553	69.3	1,629	53.2	na	na
Black or African American	5,120	79.9	4,190	80.6	930	76.8	372	62.4	na	na
Native Hawaiian or Other Pacific Islander	57	75.4	46	80.4	11	54.5	25	28.0	na	na
White	13,548	77.0	11,240	77.5	2,308	74.5	3,366	54.8	na	na
More than one race	1,207	78.3	1,000	79.3	207	73.4	132	62.1	na	na

TABLE 2-2c

Citizenship, ethnicity, and race of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in health, by sex: 2023

(Number and percent)

Citizenship, ethnicity, race, and field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
Unknown ethnicity and race	1,981	76.3	1,794	76.9	187	71.1	752	54.4	na	na
Temporary visa holders	4,028	67.7	2,774	69.3	1,254	64.0	9,488	47.5	na	na
Other health	46,389	77.6	33,295	81.4	13,094	68.1	2,424	52.8	1,369	56.8
U.S. citizens and permanent residents ^a	39,683	80.1	29,648	83.3	10,035	70.8	1,245	59.2	na	na
Hispanic or Latino	5,792	79.4	4,718	81.8	1,074	68.9	80	57.5	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	125	80.0	92	81.5	33	75.8	4	100.0	na	na
Asian	3,282	75.3	2,340	78.5	942	67.1	220	58.2	na	na
Black or African American	3,944	75.9	2,632	75.8	1,312	76.0	110	70.0	na	na
Native Hawaiian or Other Pacific Islander	45	75.6	35	80.0	10	60.0	3	100.0	na	na
White	23,487	82.0	17,644	85.6	5,843	71.2	522	56.9	na	na
More than one race	1,203	77.6	931	79.6	272	70.6	25	64.0	na	na
Unknown ethnicity and race	1,805	77.3	1,256	83.0	549	64.3	281	59.1	na	na
Temporary visa holders	6,706	62.9	3,647	66.0	3,059	59.1	1,179	46.0	na	na

na = not applicable; citizenship and race and ethnicity data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.^b Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences. Clinical medicine includes postdoctoral appointees and nonfaculty researchers in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.**Note(s):**For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering. For more information on the comparability of these counts to other NCSES published data, see the ["Technical Notes."](#)**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 2-3

Demographic characteristics of master's and doctoral students in science, engineering, and health, by enrollment intensity: 2023

(Number and percent)

Sex, citizenship, ethnicity, and race	Full time												Part time					
	All full time						First time, full time						All part time		Master's		Doctoral	
	Total		Master's		Doctoral		All first time, full time		Master's		Doctoral		Number	Percent	Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All individuals	598,588	100.0	329,971	100.0	268,617	100.0	203,798	100.0	153,545	100.0	50,253	100.0	219,507	100.0	180,895	100.0	38,612	100.0
Male	309,437	51.7	164,977	50.0	144,460	53.8	104,600	51.3	78,236	51.0	26,364	52.5	112,884	51.4	93,698	51.8	19,186	49.7
Female	289,151	48.3	164,994	50.0	124,157	46.2	99,198	48.7	75,309	49.0	23,889	47.5	106,623	48.6	87,197	48.2	19,426	50.3
U.S. citizens and permanent residents ^a	316,629	52.9	164,019	49.7	152,610	56.8	102,285	50.2	75,236	49.0	27,049	53.8	179,179	81.6	149,590	82.7	29,589	76.6
Hispanic or Latino	45,290	7.6	26,025	7.9	19,265	7.2	15,343	7.5	11,666	7.6	3,677	7.3	25,138	11.5	22,074	12.2	3,064	7.9
Not Hispanic or Latino																		
American Indian or Alaska Native	1,286	0.2	694	0.2	592	0.2	393	0.2	307	0.2	86	0.2	698	0.3	517	0.3	181	0.5
Asian	40,712	6.8	21,580	6.5	19,132	7.1	14,342	7.0	10,810	7.0	3,532	7.0	21,837	9.9	19,350	10.7	2,487	6.4
Black or African American	26,580	4.4	15,825	4.8	10,755	4.0	9,413	4.6	7,360	4.8	2,053	4.1	19,696	9.0	15,939	8.8	3,757	9.7
Native Hawaiian or Other Pacific Islander	405	0.1	248	0.1	157	0.1	124	0.1	100	0.1	24	*	349	0.2	296	0.2	53	0.1
White	174,278	29.1	85,349	25.9	88,929	33.1	53,567	26.3	38,430	25.0	15,137	30.1	95,199	43.4	77,898	43.1	17,301	44.8
More than one race	13,855	2.3	6,908	2.1	6,947	2.6	4,599	2.3	3,207	2.1	1,392	2.8	6,149	2.8	5,212	2.9	937	2.4
Unknown ethnicity and race	14,223	2.4	7,390	2.2	6,833	2.5	4,504	2.2	3,356	2.2	1,148	2.3	10,113	4.6	8,304	4.6	1,809	4.7
Temporary visa holders	281,959	47.1	165,952	50.3	116,007	43.2	101,513	49.8	78,309	51.0	23,204	46.2	40,328	18.4	31,305	17.3	9,023	23.4
Female																		
U.S. citizens and permanent residents ^a	136,268	22.8	63,296	19.2	72,972	27.2	42,514	20.9	30,058	19.6	12,456	24.8	88,016	40.1	74,444	41.2	13,572	35.1
Hispanic or Latino	18,122	3.0	9,189	2.8	8,933	3.3	5,910	2.9	4,273	2.8	1,637	3.3	11,430	5.2	10,115	5.6	1,315	3.4
Not Hispanic or Latino																		
American Indian or Alaska Native	479	0.1	242	0.1	237	0.1	149	0.1	117	0.1	32	0.1	280	0.1	217	0.1	63	0.2
Asian	19,396	3.2	9,882	3.0	9,514	3.5	6,818	3.3	5,112	3.3	1,706	3.4	11,967	5.5	10,763	5.9	1,204	3.1
Black or African American	9,182	1.5	5,161	1.6	4,021	1.5	3,177	1.6	2,425	1.6	752	1.5	7,763	3.5	6,393	3.5	1,370	3.5
Native Hawaiian or Other Pacific Islander	163	*	91	*	72	*	48	*	36	*	12	*	173	0.1	148	0.1	25	0.1
White	76,640	12.8	32,966	10.0	43,674	16.3	22,449	11.0	15,323	10.0	7,126	14.2	48,263	22.0	39,882	22.0	8,381	21.7
More than one race	5,862	1.0	2,758	0.8	3,104	1.2	1,933	0.9	1,291	0.8	642	1.3	2,917	1.3	2,531	1.4	386	1.0
Unknown ethnicity and race	6,424	1.1	3,007	0.9	3,417	1.3	2,030	1.0	1,481	1.0	549	1.1	5,223	2.4	4,395	2.4	828	2.1
Temporary visa holders	173,169	28.9	101,681	30.8	71,488	26.6	62,086	30.5	48,178	31.4	13,908	27.7	24,868	11.3	19,254	10.6	5,614	14.5
U.S. citizens and permanent residents ^a	180,361	30.1	100,723	30.5	79,638	29.6	59,771	29.3	45,178	29.4	14,593	29.0	91,163	41.5	75,146	41.5	16,017	41.5
Hispanic or Latino	27,168	4.5	16,836	5.1	10,332	3.8	9,433	4.6	7,393	4.8	2,040	4.1	13,708	6.2	11,959	6.6	1,749	4.5
Not Hispanic or Latino																		
American Indian or Alaska Native	807	0.1	452	0.1	355	0.1	244	0.1	190	0.1	54	0.1	418	0.2	300	0.2	118	0.3
Asian	21,316	3.6	11,698	3.5	9,618	3.6	7,524	3.7	5,698	3.7	1,826	3.6	9,870	4.5	8,587	4.7	1,283	3.3
Black or African American	17,398	2.9	10,664	3.2	6,734	2.5	6,236	3.1	4,935	3.2	1,301	2.6	11,933	5.4	9,546	5.3	2,387	6.2

TABLE 2-3

Demographic characteristics of master's and doctoral students in science, engineering, and health, by enrollment intensity: 2023

(Number and percent)

Sex, citizenship, ethnicity, and race	Full time												Part time					
	All full time						First time, full time						All part time		Master's		Doctoral	
	Total		Master's		Doctoral		All first time, full time		Master's		Doctoral		Number	Percent	Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Native Hawaiian or Other Pacific Islander	242	*	157	*	85	*	76	*	64	*	12	*	176	0.1	148	0.1	28	0.1
White	97,638	16.3	52,383	15.9	45,255	16.8	31,118	15.3	23,107	15.0	8,011	15.9	46,936	21.4	38,016	21.0	8,920	23.1
More than one race	7,993	1.3	4,150	1.3	3,843	1.4	2,666	1.3	1,916	1.2	750	1.5	3,232	1.5	2,681	1.5	551	1.4
Unknown ethnicity and race	7,799	1.3	4,383	1.3	3,416	1.3	2,474	1.2	1,875	1.2	599	1.2	4,890	2.2	3,909	2.2	981	2.5
Temporary visa holders	108,790	18.2	64,271	19.5	44,519	16.6	39,427	19.3	30,131	19.6	9,296	18.5	15,460	7.0	12,051	6.7	3,409	8.8

* = value < 0.05%.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.**Note(s):**

Percentages may not add to total because of rounding. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 2-4

Graduate students in science, engineering, and health broad fields, by degree program, citizenship, ethnicity, and race: 2023

(Number and percent)

Broad field	Total		U.S. citizens and permanent residents																	Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race						
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race				
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All graduate students	818,095	100.0	70,428	100.0	1,984	100.0	62,549	100.0	46,276	100.0	754	100.0	269,477	100.0	20,004	100.0	24,336	100.0	322,287	100.0	
Science	561,489	68.6	49,494	70.3	1,412	71.2	41,873	66.9	32,482	70.2	572	75.9	185,527	68.8	13,966	69.8	16,700	68.6	219,463	68.1	
Agricultural and veterinary sciences	11,755	1.4	896	1.3	41	2.1	372	0.6	422	0.9	17	2.3	5,457	2.0	244	1.2	235	1.0	4,071	1.3	
Biological and biomedical sciences	105,566	12.9	11,037	15.7	284	14.3	10,603	17.0	6,510	14.1	112	14.9	44,088	16.4	3,444	17.2	3,242	13.3	26,246	8.1	
Computer and information sciences	166,014	20.3	6,059	8.6	168	8.5	14,432	23.1	6,351	13.7	87	11.5	24,437	9.1	2,166	10.8	3,959	16.3	108,355	33.6	
Geosciences, atmospheric, and ocean sciences	11,594	1.4	1,132	1.6	29	1.5	415	0.7	311	0.7	5	0.7	6,201	2.3	454	2.3	304	1.2	2,743	0.9	
Mathematics and statistics	33,893	4.1	1,958	2.8	38	1.9	2,563	4.1	768	1.7	15	2.0	9,075	3.4	595	3.0	819	3.4	18,062	5.6	
Multidisciplinary and interdisciplinary sciences	26,429	3.2	1,935	2.7	43	2.2	2,392	3.8	1,458	3.2	25	3.3	7,814	2.9	574	2.9	731	3.0	11,457	3.6	
Natural resources and conservation	13,490	1.6	1,240	1.8	120	6.0	448	0.7	464	1.0	26	3.4	8,051	3.0	449	2.2	341	1.4	2,351	0.7	
Physical sciences	44,329	5.4	3,263	4.6	46	2.3	2,821	4.5	1,133	2.4	19	2.5	16,702	6.2	1,124	5.6	974	4.0	18,247	5.7	
Psychology	73,828	9.0	13,803	19.6	303	15.3	4,066	6.5	8,765	18.9	153	20.3	34,623	12.8	2,696	13.5	3,579	14.7	5,840	1.8	
Social sciences	74,591	9.1	8,171	11.6	340	17.1	3,761	6.0	6,300	13.6	113	15.0	29,079	10.8	2,220	11.1	2,516	10.3	22,091	6.9	
Engineering	175,559	21.5	10,604	15.1	221	11.1	13,441	21.5	4,730	10.2	80	10.6	46,915	17.4	3,628	18.1	3,850	15.8	92,090	28.6	
Aerospace, aeronautical, and astronautical engineering	8,264	1.0	778	1.1	13	0.7	907	1.5	181	0.4	8	1.1	3,873	1.4	289	1.4	178	0.7	2,037	0.6	
Biological, biomedical, and biosystems engineering	15,203	1.9	1,220	1.7	20	1.0	1,972	3.2	587	1.3	9	1.2	4,942	1.8	440	2.2	434	1.8	5,579	1.7	
Chemical, petroleum, and chemical-related engineering	10,546	1.3	520	0.7	11	0.6	920	1.5	222	0.5	5	0.7	2,846	1.1	192	1.0	183	0.8	5,647	1.8	
Civil, environmental, transportation and related engineering fields	19,934	2.4	1,353	1.9	54	2.7	1,063	1.7	500	1.1	14	1.9	5,331	2.0	360	1.8	318	1.3	10,941	3.4	
Electrical, electronics, communications and computer engineering	48,799	6.0	2,124	3.0	31	1.6	3,692	5.9	1,067	2.3	18	2.4	8,610	3.2	752	3.8	969	4.0	31,536	9.8	
Industrial, manufacturing, systems engineering and operations research	15,762	1.9	1,121	1.6	13	0.7	970	1.6	542	1.2	4	0.5	4,084	1.5	280	1.4	484	2.0	8,264	2.6	
Mechanical engineering	27,014	3.3	1,839	2.6	33	1.7	2,045	3.3	586	1.3	11	1.5	8,051	3.0	673	3.4	506	2.1	13,270	4.1	
Metallurgical, mining, materials and related engineering fields	7,244	0.9	521	0.7	12	0.6	545	0.9	181	0.4	3	0.4	2,338	0.9	186	0.9	142	0.6	3,316	1.0	
Other engineering	22,793	2.8	1,128	1.6	34	1.7	1,327	2.1	864	1.9	8	1.1	6,840	2.5	456	2.3	636	2.6	11,500	3.6	
Health	81,047	9.9	10,330	14.7	351	17.7	7,235	11.6	9,064	19.6	102	13.5	37,035	13.7	2,410	12.0	3,786	15.6	10,734	3.3	
Clinical medicine ^a	34,658	4.2	4,538	6.4	226	11.4	3,953	6.3	5,120	11.1	57	7.6	13,548	5.0	1,207	6.0	1,981	8.1	4,028	1.2	
Other health	46,389	5.7	5,792	8.2	125	6.3	3,282	5.2	3,944	8.5	45	6.0	23,487	8.7	1,203	6.0	1,805	7.4	6,706	2.1	
Master's students	510,866	62.4	48,099	68.3	1,211	61.0	40,930	65.4	31,764	68.6	544	72.1	163,247	60.6	12,120	60.6	15,694	64.5	197,257	61.2	
Science	348,520	42.6	32,310	45.9	808	40.7	26,885	43.0	22,048	47.6	413	54.8	105,997	39.3	7,998	40.0	10,264	42.2	141,797	44.0	
Agricultural and veterinary sciences	6,901	0.8	653	0.9	27	1.4	236	0.4	323	0.7	16	2.1	3,702	1.4	169	0.8	165	0.7	1,610	0.5	
Biological and biomedical sciences	44,703	5.5	5,086	7.2	125	6.3	4,966	7.9	3,905	8.4	61	8.1	18,362	6.8	1,525	7.6	1,609	6.6	9,064	2.8	
Computer and information sciences	143,530	17.5	5,425	7.7	141	7.1	12,577	20.1	5,529	11.9	75	9.9	20,179	7.5	1,784	8.9	3,336	13.7	94,484	29.3	
Geosciences, atmospheric, and ocean sciences	4,793	0.6	582	0.8	19	1.0	159	0.3	143	0.3	3	0.4	2,985	1.1	189	0.9	129	0.5	584	0.2	
Mathematics and statistics	20,105	2.5	1,250	1.8	27	1.4	1,553	2.5	548	1.2	11	1.5	4,917	1.8	321	1.6	459	1.9	11,019	3.4	

TABLE 2-4

Graduate students in science, engineering, and health broad fields, by degree program, citizenship, ethnicity, and race: 2023

(Number and percent)

Broad field	Total		U.S. citizens and permanent residents																	Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race						
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race				
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Multidisciplinary and interdisciplinary sciences	21,928	2.7	1,596	2.3	33	1.7	2,071	3.3	1,206	2.6	20	2.7	6,085	2.3	448	2.2	605	2.5	9,864	3.1	
Natural resources and conservation	9,486	1.2	953	1.4	76	3.8	295	0.5	306	0.7	23	3.1	6,091	2.3	350	1.7	215	0.9	1,177	0.4	
Physical sciences	6,000	0.7	716	1.0	5	0.3	418	0.7	315	0.7	6	0.8	2,601	1.0	182	0.9	179	0.7	1,578	0.5	
Psychology	49,474	6.0	10,496	14.9	190	9.6	2,544	4.1	5,722	12.4	120	15.9	23,337	8.7	1,708	8.5	2,253	9.3	3,104	1.0	
Social sciences	41,600	5.1	5,553	7.9	165	8.3	2,066	3.3	4,051	8.8	78	10.3	17,738	6.6	1,322	6.6	1,314	5.4	9,313	2.9	
Engineering	100,567	12.3	7,204	10.2	138	7.0	8,305	13.3	2,894	6.3	50	6.6	28,366	10.5	2,191	11.0	2,380	9.8	49,039	15.2	
Aerospace, aeronautical, and astronautical engineering	5,380	0.7	588	0.8	7	0.4	669	1.1	117	0.3	6	0.8	2,712	1.0	193	1.0	130	0.5	958	0.3	
Biological, biomedical, and biosystems engineering	5,204	0.6	459	0.7	8	0.4	770	1.2	225	0.5	3	0.4	1,663	0.6	156	0.8	111	0.5	1,809	0.6	
Chemical, petroleum, and chemical-related engineering	2,658	0.3	165	0.2	3	0.2	277	0.4	65	0.1	2	0.3	723	0.3	54	0.3	61	0.3	1,308	0.4	
Civil, environmental, transportation and related engineering fields	12,082	1.5	1,081	1.5	39	2.0	766	1.2	338	0.7	8	1.1	3,889	1.4	254	1.3	213	0.9	5,494	1.7	
Electrical, electronics, communications and computer engineering	31,093	3.8	1,617	2.3	25	1.3	2,610	4.2	756	1.6	13	1.7	5,657	2.1	512	2.6	663	2.7	19,240	6.0	
Industrial, manufacturing, systems engineering and operations research	11,873	1.5	1,006	1.4	10	0.5	756	1.2	391	0.8	3	0.4	3,220	1.2	222	1.1	404	1.7	5,861	1.8	
Mechanical engineering	15,335	1.9	1,288	1.8	21	1.1	1,389	2.2	365	0.8	9	1.2	5,193	1.9	450	2.2	302	1.2	6,318	2.0	
Metallurgical, mining, materials and related engineering fields	2,462	0.3	219	0.3	6	0.3	200	0.3	74	0.2	2	0.3	918	0.3	70	0.3	71	0.3	902	0.3	
Other engineering	14,480	1.8	781	1.1	19	1.0	868	1.4	563	1.2	4	0.5	4,391	1.6	280	1.4	425	1.7	7,149	2.2	
Health	61,779	7.6	8,585	12.2	265	13.4	5,740	9.2	6,822	14.7	81	10.7	28,884	10.7	1,931	9.7	3,050	12.5	6,421	2.0	
Clinical medicine ^a	28,484	3.5	3,867	5.5	173	8.7	3,400	5.4	4,190	9.1	46	6.1	11,240	4.2	1,000	5.0	1,794	7.4	2,774	0.9	
Other health	33,295	4.1	4,718	6.7	92	4.6	2,340	3.7	2,632	5.7	35	4.6	17,644	6.5	931	4.7	1,256	5.2	3,647	1.1	
Doctoral students	307,229	37.6	22,329	31.7	773	39.0	21,619	34.6	14,512	31.4	210	27.9	106,230	39.4	7,884	39.4	8,642	35.5	125,030	38.8	
Science	212,969	26.0	17,184	24.4	604	30.4	14,988	24.0	10,434	22.5	159	21.1	79,530	29.5	5,968	29.8	6,436	26.4	77,666	24.1	
Agricultural and veterinary sciences	4,854	0.6	243	0.3	14	0.7	136	0.2	99	0.2	1	0.1	1,755	0.7	75	0.4	70	0.3	2,461	0.8	
Biological and biomedical sciences	60,863	7.4	5,951	8.4	159	8.0	5,637	9.0	2,605	5.6	51	6.8	25,726	9.5	1,919	9.6	1,633	6.7	17,182	5.3	
Computer and information sciences	22,484	2.7	634	0.9	27	1.4	1,855	3.0	822	1.8	12	1.6	4,258	1.6	382	1.9	623	2.6	13,871	4.3	
Geosciences, atmospheric, and ocean sciences	6,801	0.8	550	0.8	10	0.5	256	0.4	168	0.4	2	0.3	3,216	1.2	265	1.3	175	0.7	2,159	0.7	
Mathematics and statistics	13,788	1.7	708	1.0	11	0.6	1,010	1.6	220	0.5	4	0.5	4,158	1.5	274	1.4	360	1.5	7,043	2.2	
Multidisciplinary and interdisciplinary sciences	4,501	0.6	339	0.5	10	0.5	321	0.5	252	0.5	5	0.7	1,729	0.6	126	0.6	126	0.5	1,593	0.5	
Natural resources and conservation	4,004	0.5	287	0.4	44	2.2	153	0.2	158	0.3	3	0.4	1,960	0.7	99	0.5	126	0.5	1,174	0.4	
Physical sciences	38,329	4.7	2,547	3.6	41	2.1	2,403	3.8	818	1.8	13	1.7	14,101	5.2	942	4.7	795	3.3	16,669	5.2	
Psychology	24,354	3.0	3,307	4.7	113	5.7	1,522	2.4	3,043	6.6	33	4.4	11,286	4.2	988	4.9	1,326	5.4	2,736	0.8	
Social sciences	32,991	4.0	2,618	3.7	175	8.8	1,695	2.7	2,249	4.9	35	4.6	11,341	4.2	898	4.5	1,202	4.9	12,778	4.0	
Engineering	74,992	9.2	3,400	4.8	83	4.2	5,136	8.2	1,836	4.0	30	4.0	18,549	6.9	1,437	7.2	1,470	6.0	43,051	13.4	
Aerospace, aeronautical, and astronautical engineering	2,884	0.4	190	0.3	6	0.3	238	0.4	64	0.1	2	0.3	1,161	0.4	96	0.5	48	0.2	1,079	0.3	

TABLE 2-4

Graduate students in science, engineering, and health broad fields, by degree program, citizenship, ethnicity, and race: 2023

(Number and percent)

Broad field	Total		U.S. citizens and permanent residents																Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race					
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race			
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Biological, biomedical, and biosystems engineering	9,999	1.2	761	1.1	12	0.6	1,202	1.9	362	0.8	6	0.8	3,279	1.2	284	1.4	323	1.3	3,770	1.2
Chemical, petroleum, and chemical-related engineering	7,888	1.0	355	0.5	8	0.4	643	1.0	157	0.3	3	0.4	2,123	0.8	138	0.7	122	0.5	4,339	1.3
Civil, environmental, transportation and related engineering fields	7,852	1.0	272	0.4	15	0.8	297	0.5	162	0.4	6	0.8	1,442	0.5	106	0.5	105	0.4	5,447	1.7
Electrical, electronics, communications and computer engineering	17,706	2.2	507	0.7	6	0.3	1,082	1.7	311	0.7	5	0.7	2,953	1.1	240	1.2	306	1.3	12,296	3.8
Industrial, manufacturing, systems engineering and operations research	3,889	0.5	115	0.2	3	0.2	214	0.3	151	0.3	1	0.1	864	0.3	58	0.3	80	0.3	2,403	0.7
Mechanical engineering	11,679	1.4	551	0.8	12	0.6	656	1.0	221	0.5	2	0.3	2,858	1.1	223	1.1	204	0.8	6,952	2.2
Metallurgical, mining, materials and related engineering fields	4,782	0.6	302	0.4	6	0.3	345	0.6	107	0.2	1	0.1	1,420	0.5	116	0.6	71	0.3	2,414	0.7
Other engineering	8,313	1.0	347	0.5	15	0.8	459	0.7	301	0.7	4	0.5	2,449	0.9	176	0.9	211	0.9	4,351	1.4
Health	19,268	2.4	1,745	2.5	86	4.3	1,495	2.4	2,242	4.8	21	2.8	8,151	3.0	479	2.4	736	3.0	4,313	1.3
Clinical medicine ^a	6,174	0.8	671	1.0	53	2.7	553	0.9	930	2.0	11	1.5	2,308	0.9	207	1.0	187	0.8	1,254	0.4
Other health	13,094	1.6	1,074	1.5	33	1.7	942	1.5	1,312	2.8	10	1.3	5,843	2.2	272	1.4	549	2.3	3,059	0.9

^a Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences.

Note(s):

Percentages may not add to total because of rounding. Ethnicity and race data are available only for U.S. citizens and permanent residents. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Federal		Institutional		Nonfederal domestic		Foreign		Self-support	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All graduate students	598,588	82,764	13.8	235,491	39.3	22,852	3.8	3,394	0.6	254,087	42.4
Science	411,971	53,353	13.0	171,212	41.6	12,558	3.0	1,802	0.4	173,046	42.0
Agricultural and veterinary sciences	8,319	1,967	23.6	4,028	48.4	829	10.0	40	0.5	1,455	17.5
Biological and biomedical sciences	86,153	21,445	24.9	39,510	45.9	4,076	4.7	355	0.4	20,767	24.1
Computer and information sciences	113,633	6,387	5.6	28,332	24.9	2,388	2.1	466	0.4	76,060	66.9
Geosciences, atmospheric, and ocean sciences	9,519	2,607	27.4	5,199	54.6	458	4.8	99	1.0	1,156	12.1
Mathematics and statistics	26,832	1,633	6.1	13,820	51.5	448	1.7	123	0.5	10,808	40.3
Multidisciplinary and interdisciplinary sciences	17,187	1,002	5.8	5,438	31.6	363	2.1	64	0.4	10,320	60.0
Natural resources and conservation	9,028	1,519	16.8	4,298	47.6	424	4.7	25	0.3	2,762	30.6
Physical sciences	39,475	10,449	26.5	24,345	61.7	1,684	4.3	221	0.6	2,776	7.0
Psychology	47,479	3,264	6.9	15,632	32.9	676	1.4	62	0.1	27,845	58.6
Social sciences	54,346	3,080	5.7	30,610	56.3	1,212	2.2	347	0.6	19,097	35.1
Engineering	131,607	25,054	19.0	49,397	37.5	8,836	6.7	1,292	1.0	47,028	35.7
Aerospace, aeronautical, and astronautical engineering	5,447	1,443	26.5	2,030	37.3	393	7.2	97	1.8	1,484	27.2
Biological, biomedical, and biosystems engineering	13,267	3,548	26.7	5,680	42.8	1,106	8.3	79	0.6	2,854	21.5
Chemical, petroleum, and chemical-related engineering	9,328	2,494	26.7	4,366	46.8	964	10.3	137	1.5	1,367	14.7
Civil, environmental, transportation and related engineering fields	14,930	2,349	15.7	6,575	44.0	733	4.9	149	1.0	5,124	34.3
Electrical, electronics, communications and computer engineering	37,357	5,607	15.0	11,976	32.1	2,178	5.8	317	0.8	17,279	46.3
Industrial, manufacturing, systems engineering and operations research	9,291	1,099	11.8	2,986	32.1	370	4.0	75	0.8	4,761	51.2
Mechanical engineering	20,323	4,254	20.9	8,173	40.2	1,420	7.0	252	1.2	6,224	30.6
Metallurgical, mining, materials and related engineering fields	5,990	1,785	29.8	2,404	40.1	641	10.7	67	1.1	1,093	18.2
Other engineering	15,674	2,475	15.8	5,207	33.2	1,031	6.6	119	0.8	6,842	43.7
Health	55,010	4,357	7.9	14,882	27.1	1,458	2.7	300	0.5	34,013	61.8
Clinical medicine ^a	20,426	1,947	9.5	5,489	26.9	583	2.9	99	0.5	12,308	60.3
Other health	34,584	2,410	7.0	9,393	27.2	875	2.5	201	0.6	21,705	62.8
Master's students	329,971	15,602	4.7	76,571	23.2	7,591	2.3	1,088	0.3	229,119	69.4
Science	222,976	9,485	4.3	52,238	23.4	4,151	1.9	624	0.3	156,478	70.2
Agricultural and veterinary sciences	4,186	734	17.5	1,844	44.1	400	9.6	13	0.3	1,195	28.5
Biological and biomedical sciences	29,180	1,928	6.6	7,549	25.9	932	3.2	90	0.3	18,681	64.0
Computer and information sciences	94,517	1,855	2.0	16,983	18.0	1,260	1.3	215	0.2	74,204	78.5
Geosciences, atmospheric, and ocean sciences	3,376	590	17.5	1,773	52.5	137	4.1	23	0.7	853	25.3
Mathematics and statistics	14,237	217	1.5	3,731	26.2	161	1.1	28	0.2	10,100	70.9
Multidisciplinary and interdisciplinary sciences	13,413	474	3.5	2,910	21.7	209	1.6	38	0.3	9,782	72.9
Natural resources and conservation	5,764	760	13.2	2,382	41.3	222	3.9	7	0.1	2,393	41.5
Physical sciences	3,471	319	9.2	1,508	43.4	74	2.1	21	0.6	1,549	44.6

TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Federal		Institutional		Nonfederal domestic		Foreign		Self-support	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Psychology	28,571	1,139	4.0	5,064	17.7	195	0.7	23	0.1	22,150	77.5
Social sciences	26,261	1,469	5.6	8,494	32.3	561	2.1	166	0.6	15,571	59.3
Engineering	65,160	3,905	6.0	15,630	24.0	2,477	3.8	310	0.5	42,838	65.7
Aerospace, aeronautical, and astronautical engineering	2,883	444	15.4	969	33.6	148	5.1	22	0.8	1,300	45.1
Biological, biomedical, and biosystems engineering	3,961	183	4.6	1,161	29.3	98	2.5	10	0.3	2,509	63.3
Chemical, petroleum, and chemical-related engineering	1,827	102	5.6	520	28.5	98	5.4	9	0.5	1,098	60.1
Civil, environmental, transportation and related engineering fields	7,984	527	6.6	2,631	33.0	220	2.8	62	0.8	4,544	56.9
Electrical, electronics, communications and computer engineering	21,886	834	3.8	4,157	19.0	708	3.2	76	0.3	16,111	73.6
Industrial, manufacturing, systems engineering and operations research	6,287	426	6.8	1,196	19.0	168	2.7	41	0.7	4,456	70.9
Mechanical engineering	9,861	786	8.0	2,991	30.3	386	3.9	65	0.7	5,633	57.1
Metallurgical, mining, materials and related engineering fields	1,619	169	10.4	452	27.9	141	8.7	7	0.4	850	52.5
Other engineering	8,852	434	4.9	1,553	17.5	510	5.8	18	0.2	6,337	71.6
Health	41,835	2,212	5.3	8,703	20.8	963	2.3	154	0.4	29,803	71.2
Clinical medicine ^a	16,700	1,200	7.2	3,616	21.7	404	2.4	62	0.4	11,418	68.4
Other health	25,135	1,012	4.0	5,087	20.2	559	2.2	92	0.4	18,385	73.1
Doctoral students	268,617	67,162	25.0	158,920	59.2	15,261	5.7	2,306	0.9	24,968	9.3
Science	188,995	43,868	23.2	118,974	63.0	8,407	4.4	1,178	0.6	16,568	8.8
Agricultural and veterinary sciences	4,133	1,233	29.8	2,184	52.8	429	10.4	27	0.7	260	6.3
Biological and biomedical sciences	56,973	19,517	34.3	31,961	56.1	3,144	5.5	265	0.5	2,086	3.7
Computer and information sciences	19,116	4,532	23.7	11,349	59.4	1,128	5.9	251	1.3	1,856	9.7
Geosciences, atmospheric, and ocean sciences	6,143	2,017	32.8	3,426	55.8	321	5.2	76	1.2	303	4.9
Mathematics and statistics	12,595	1,416	11.2	10,089	80.1	287	2.3	95	0.8	708	5.6
Multidisciplinary and interdisciplinary sciences	3,774	528	14.0	2,528	67.0	154	4.1	26	0.7	538	14.3
Natural resources and conservation	3,264	759	23.3	1,916	58.7	202	6.2	18	0.6	369	11.3
Physical sciences	36,004	10,130	28.1	22,837	63.4	1,610	4.5	200	0.6	1,227	3.4
Psychology	18,908	2,125	11.2	10,568	55.9	481	2.5	39	0.2	5,695	30.1
Social sciences	28,085	1,611	5.7	22,116	78.7	651	2.3	181	0.6	3,526	12.6
Engineering	66,447	21,149	31.8	33,767	50.8	6,359	9.6	982	1.5	4,190	6.3
Aerospace, aeronautical, and astronautical engineering	2,564	999	39.0	1,061	41.4	245	9.6	75	2.9	184	7.2
Biological, biomedical, and biosystems engineering	9,306	3,365	36.2	4,519	48.6	1,008	10.8	69	0.7	345	3.7
Chemical, petroleum, and chemical-related engineering	7,501	2,392	31.9	3,846	51.3	866	11.5	128	1.7	269	3.6
Civil, environmental, transportation and related engineering fields	6,946	1,822	26.2	3,944	56.8	513	7.4	87	1.3	580	8.4
Electrical, electronics, communications and computer engineering	15,471	4,773	30.9	7,819	50.5	1,470	9.5	241	1.6	1,168	7.5
Industrial, manufacturing, systems engineering and operations research	3,004	673	22.4	1,790	59.6	202	6.7	34	1.1	305	10.2
Mechanical engineering	10,462	3,468	33.1	5,182	49.5	1,034	9.9	187	1.8	591	5.6

TABLE 3-1

Primary source of support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Federal		Institutional		Nonfederal domestic		Foreign		Self-support	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Metallurgical, mining, materials and related engineering fields	4,371	1,616	37.0	1,952	44.7	500	11.4	60	1.4	243	5.6
Other engineering	6,822	2,041	29.9	3,654	53.6	521	7.6	101	1.5	505	7.4
Health	13,175	2,145	16.3	6,179	46.9	495	3.8	146	1.1	4,210	32.0
Clinical medicine ^a	3,726	747	20.0	1,873	50.3	179	4.8	37	1.0	890	23.9
Other health	9,449	1,398	14.8	4,306	45.6	316	3.3	109	1.2	3,320	35.1

^a Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 3-2

Primary source of support for postdoctoral appointees in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Federal		Institutional		Nonfederal domestic		Foreign		Self-support		Unknown	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All surveyed fields	65,850	32,155	48.8	16,011	24.3	9,579	14.5	1,159	1.8	726	1.1	6,220	9.4
Science	37,982	18,913	49.8	9,629	25.4	5,170	13.6	517	1.4	357	0.9	3,396	8.9
Agricultural and veterinary sciences	1,993	853	42.8	638	32.0	317	15.9	20	1.0	4	0.2	161	8.1
Biological and biomedical sciences	19,520	10,520	53.9	3,936	20.2	2,692	13.8	228	1.2	119	0.6	2,025	10.4
Computer and information sciences	987	437	44.3	314	31.8	138	14.0	22	2.2	15	1.5	61	6.2
Geosciences, atmospheric, and ocean sciences	1,919	928	48.4	453	23.6	242	12.6	55	2.9	85	4.4	156	8.1
Mathematics and statistics	1,220	306	25.1	671	55.0	109	8.9	8	0.7	11	0.9	115	9.4
Multidisciplinary and interdisciplinary sciences	988	416	42.1	307	31.1	119	12.0	14	1.4	13	1.3	119	12.0
Natural resources and conservation	937	437	46.6	270	28.8	143	15.3	20	2.1	18	1.9	49	5.2
Physical sciences	7,220	3,924	54.3	1,682	23.3	949	13.1	93	1.3	62	0.9	510	7.1
Psychology	1,344	719	53.5	352	26.2	143	10.6	19	1.4	19	1.4	92	6.8
Social sciences	1,854	373	20.1	1,006	54.3	318	17.2	38	2.0	11	0.6	108	5.8
Engineering	9,051	4,431	49.0	2,324	25.7	1,388	15.3	246	2.7	108	1.2	554	6.1
Aerospace, aeronautical, and astronautical engineering	254	134	52.8	57	22.4	28	11.0	5	2.0	2	0.8	28	11.0
Biological, biomedical, and biosystems engineering	1,594	881	55.3	308	19.3	244	15.3	17	1.1	5	0.3	139	8.7
Chemical, petroleum, and chemical-related engineering	1,501	689	45.9	350	23.3	319	21.3	44	2.9	21	1.4	78	5.2
Civil, environmental, transportation and related engineering fields	1,070	447	41.8	380	35.5	165	15.4	20	1.9	10	0.9	48	4.5
Electrical, electronics, communications and computer engineering	1,339	693	51.8	318	23.7	198	14.8	42	3.1	22	1.6	66	4.9
Industrial, manufacturing, systems engineering and operations research	170	61	35.9	72	42.4	16	9.4	2	1.2	0	0.0	19	11.2
Mechanical engineering	1,317	655	49.7	381	28.9	142	10.8	48	3.6	14	1.1	77	5.8
Metallurgical, mining, materials and related engineering fields	557	277	49.7	137	24.6	95	17.1	12	2.2	10	1.8	26	4.7
Other engineering	1,249	594	47.6	321	25.7	181	14.5	56	4.5	24	1.9	73	5.8
Health	18,817	8,811	46.8	4,058	21.6	3,021	16.1	396	2.1	261	1.4	2,270	12.1
Clinical medicine ^a	16,393	7,678	46.8	3,528	21.5	2,457	15.0	388	2.4	250	1.5	2,092	12.8
Other health	2,424	1,133	46.7	530	21.9	564	23.3	8	0.3	11	0.5	178	7.3

^a Clinical medicine includes postdoctoral appointees in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.

Note(s):

For postdoctoral appointees, "field" refers to the field of the unit that reports information on this group to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 3-3

Detailed primary source of federal support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	DOD		DOE		HHS: NIH		HHS: Other HHS		NASA		NSF		USDA		Other	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All graduate students	82,764	9,171	11.1	5,757	7.0	23,172	28.0	3,314	4.0	2,178	2.6	21,209	25.6	3,332	4.0	14,631	17.7
Science	53,353	3,669	6.9	2,892	5.4	18,374	34.4	1,712	3.2	1,362	2.6	13,219	24.8	2,852	5.3	9,273	17.4
Agricultural and veterinary sciences	1,967	28	1.4	48	2.4	120	6.1	116	5.9	8	0.4	141	7.2	1,206	61.3	300	15.3
Biological and biomedical sciences	21,445	462	2.2	211	1.0	14,648	68.3	811	3.8	76	0.4	2,377	11.1	878	4.1	1,982	9.2
Computer and information sciences	6,387	1,240	19.4	195	3.1	434	6.8	149	2.3	95	1.5	2,989	46.8	99	1.6	1,186	18.6
Geosciences, atmospheric, and ocean sciences	2,607	148	5.7	118	4.5	16	0.6	10	0.4	431	16.5	1,214	46.6	33	1.3	637	24.4
Mathematics and statistics	1,633	137	8.4	35	2.1	202	12.4	43	2.6	20	1.2	996	61.0	16	1.0	184	11.3
Multidisciplinary and interdisciplinary sciences	1,002	53	5.3	49	4.9	208	20.8	14	1.4	25	2.5	201	20.1	17	1.7	435	43.4
Natural resources and conservation	1,519	46	3.0	66	4.3	58	3.8	79	5.2	54	3.6	304	20.0	322	21.2	590	38.8
Physical sciences	10,449	788	7.5	2,144	20.5	1,749	16.7	198	1.9	615	5.9	4,017	38.4	42	0.4	896	8.6
Psychology	3,264	206	6.3	2	0.1	766	23.5	204	6.3	5	0.2	371	11.4	18	0.6	1,692	51.8
Social sciences	3,080	561	18.2	24	0.8	173	5.6	88	2.9	33	1.1	609	19.8	221	7.2	1,371	44.5
Engineering	25,054	5,140	20.5	2,857	11.4	3,273	13.1	883	3.5	816	3.3	7,888	31.5	459	1.8	3,738	14.9
Aerospace, aeronautical, and astronautical engineering	1,443	652	45.2	86	6.0	5	0.3	1	0.1	231	16.0	205	14.2	0	0.0	263	18.2
Biological, biomedical, and biosystems engineering	3,548	187	5.3	20	0.6	2,001	56.4	261	7.4	9	0.3	686	19.3	64	1.8	320	9.0
Chemical, petroleum, and chemical-related engineering	2,494	239	9.6	488	19.6	294	11.8	58	2.3	37	1.5	1,064	42.7	20	0.8	294	11.8
Civil, environmental, transportation and related engineering fields	2,349	305	13.0	204	8.7	34	1.4	102	4.3	84	3.6	769	32.7	55	2.3	796	33.9
Electrical, electronics, communications and computer engineering	5,607	1,503	26.8	462	8.2	411	7.3	108	1.9	134	2.4	2,216	39.5	67	1.2	706	12.6
Industrial, manufacturing, systems engineering and operations research	1,099	413	37.6	43	3.9	32	2.9	62	5.6	20	1.8	329	29.9	9	0.8	191	17.4
Mechanical engineering	4,254	1,072	25.2	593	13.9	261	6.1	90	2.1	191	4.5	1,417	33.3	50	1.2	580	13.6
Metallurgical, mining, materials and related engineering fields	1,785	375	21.0	399	22.4	50	2.8	82	4.6	52	2.9	606	33.9	13	0.7	208	11.7
Other engineering	2,475	394	15.9	562	22.7	185	7.5	119	4.8	58	2.3	596	24.1	181	7.3	380	15.4
Health	4,357	362	8.3	8	0.2	1,525	35.0	719	16.5	0	0.0	102	2.3	21	0.5	1,620	37.2
Clinical medicine ^a	1,947	100	5.1	8	0.4	532	27.3	429	22.0	0	0.0	36	1.8	16	0.8	826	42.4
Other health	2,410	262	10.9	0	0.0	993	41.2	290	12.0	0	0.0	66	2.7	5	0.2	794	32.9
Master's students	15,602	2,815	18.0	550	3.5	1,106	7.1	750	4.8	307	2.0	2,072	13.3	1,187	7.6	6,815	43.7
Science	9,485	1,212	12.8	170	1.8	704	7.4	275	2.9	163	1.7	1,354	14.3	1,066	11.2	4,541	47.9
Agricultural and veterinary sciences	734	2	0.3	10	1.4	14	1.9	37	5.0	3	0.4	37	5.0	496	67.6	135	18.4
Biological and biomedical sciences	1,928	93	4.8	26	1.3	453	23.5	90	4.7	8	0.4	236	12.2	243	12.6	779	40.4
Computer and information sciences	1,855	405	21.8	51	2.7	113	6.1	45	2.4	49	2.6	432	23.3	48	2.6	712	38.4
Geosciences, atmospheric, and ocean sciences	590	43	7.3	24	4.1	0	0.0	5	0.8	54	9.2	237	40.2	7	1.2	220	37.3
Mathematics and statistics	217	36	16.6	1	0.5	34	15.7	4	1.8	5	2.3	60	27.6	2	0.9	75	34.6
Multidisciplinary and interdisciplinary sciences	474	34	7.2	2	0.4	19	4.0	3	0.6	5	1.1	52	11.0	4	0.8	355	74.9
Natural resources and conservation	760	28	3.7	24	3.2	8	1.1	38	5.0	11	1.4	110	14.5	175	23.0	366	48.2
Physical sciences	319	74	23.2	26	8.2	18	5.6	4	1.3	22	6.9	78	24.5	6	1.9	91	28.5

TABLE 3-3

Detailed primary source of federal support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	DOD		DOE		HHS: NIH		HHS: Other HHS		NASA		NSF		USDA		Other	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Psychology	1,139	82	7.2	0	0.0	35	3.1	28	2.5	0	0.0	19	1.7	7	0.6	968	85.0
Social sciences	1,469	415	28.3	6	0.4	10	0.7	21	1.4	6	0.4	93	6.3	78	5.3	840	57.2
Engineering	3,905	1,338	34.3	372	9.5	138	3.5	124	3.2	144	3.7	689	17.6	108	2.8	992	25.4
Aerospace, aeronautical, and astronautical engineering	444	256	57.7	20	4.5	1	0.2	0	0.0	44	9.9	24	5.4	0	0.0	99	22.3
Biological, biomedical, and biosystems engineering	183	21	11.5	1	0.5	55	30.1	9	4.9	2	1.1	31	16.9	15	8.2	49	26.8
Chemical, petroleum, and chemical-related engineering	102	13	12.7	21	20.6	9	8.8	3	2.9	2	2.0	29	28.4	3	2.9	22	21.6
Civil, environmental, transportation and related engineering fields	527	88	16.7	35	6.6	5	0.9	25	4.7	14	2.7	104	19.7	16	3.0	240	45.5
Electrical, electronics, communications and computer engineering	834	285	34.2	67	8.0	30	3.6	13	1.6	32	3.8	228	27.3	8	1.0	171	20.5
Industrial, manufacturing, systems engineering and operations research	426	250	58.7	12	2.8	5	1.2	22	5.2	3	0.7	33	7.7	4	0.9	97	22.8
Mechanical engineering	786	266	33.8	112	14.2	19	2.4	23	2.9	34	4.3	163	20.7	11	1.4	158	20.1
Metallurgical, mining, materials and related engineering fields	169	61	36.1	32	18.9	2	1.2	12	7.1	7	4.1	28	16.6	0	0.0	27	16.0
Other engineering	434	98	22.6	72	16.6	12	2.8	17	3.9	6	1.4	49	11.3	51	11.8	129	29.7
Health	2,212	265	12.0	8	0.4	264	11.9	351	15.9	0	0.0	29	1.3	13	0.6	1,282	58.0
Clinical medicine ^a	1,200	71	5.9	8	0.7	145	12.1	266	22.2	0	0.0	15	1.3	9	0.8	686	57.2
Other health	1,012	194	19.2	0	0.0	119	11.8	85	8.4	0	0.0	14	1.4	4	0.4	596	58.9
Doctoral students	67,162	6,356	9.5	5,207	7.8	22,066	32.9	2,564	3.8	1,871	2.8	19,137	28.5	2,145	3.2	7,816	11.6
Science	43,868	2,457	5.6	2,722	6.2	17,670	40.3	1,437	3.3	1,199	2.7	11,865	27.0	1,786	4.1	4,732	10.8
Agricultural and veterinary sciences	1,233	26	2.1	38	3.1	106	8.6	79	6.4	5	0.4	104	8.4	710	57.6	165	13.4
Biological and biomedical sciences	19,517	369	1.9	185	0.9	14,195	72.7	721	3.7	68	0.3	2,141	11.0	635	3.3	1,203	6.2
Computer and information sciences	4,532	835	18.4	144	3.2	321	7.1	104	2.3	46	1.0	2,557	56.4	51	1.1	474	10.5
Geosciences, atmospheric, and ocean sciences	2,017	105	5.2	94	4.7	16	0.8	5	0.2	377	18.7	977	48.4	26	1.3	417	20.7
Mathematics and statistics	1,416	101	7.1	34	2.4	168	11.9	39	2.8	15	1.1	936	66.1	14	1.0	109	7.7
Multidisciplinary and interdisciplinary sciences	528	19	3.6	47	8.9	189	35.8	11	2.1	20	3.8	149	28.2	13	2.5	80	15.2
Natural resources and conservation	759	18	2.4	42	5.5	50	6.6	41	5.4	43	5.7	194	25.6	147	19.4	224	29.5
Physical sciences	10,130	714	7.0	2,118	20.9	1,731	17.1	194	1.9	593	5.9	3,939	38.9	36	0.4	805	7.9
Psychology	2,125	124	5.8	2	0.1	731	34.4	176	8.3	5	0.2	352	16.6	11	0.5	724	34.1
Social sciences	1,611	146	9.1	18	1.1	163	10.1	67	4.2	27	1.7	516	32.0	143	8.9	531	33.0
Engineering	21,149	3,802	18.0	2,485	11.7	3,135	14.8	759	3.6	672	3.2	7,199	34.0	351	1.7	2,746	13.0
Aerospace, aeronautical, and astronautical engineering	999	396	39.6	66	6.6	4	0.4	1	0.1	187	18.7	181	18.1	0	0.0	164	16.4
Biological, biomedical, and biosystems engineering	3,365	166	4.9	19	0.6	1,946	57.8	252	7.5	7	0.2	655	19.5	49	1.5	271	8.1
Chemical, petroleum, and chemical-related engineering	2,392	226	9.4	467	19.5	285	11.9	55	2.3	35	1.5	1,035	43.3	17	0.7	272	11.4
Civil, environmental, transportation and related engineering fields	1,822	217	11.9	169	9.3	29	1.6	77	4.2	70	3.8	665	36.5	39	2.1	556	30.5
Electrical, electronics, communications and computer engineering	4,773	1,218	25.5	395	8.3	381	8.0	95	2.0	102	2.1	1,988	41.7	59	1.2	535	11.2
Industrial, manufacturing, systems engineering and operations research	673	163	24.2	31	4.6	27	4.0	40	5.9	17	2.5	296	44.0	5	0.7	94	14.0
Mechanical engineering	3,468	806	23.2	481	13.9	242	7.0	67	1.9	157	4.5	1,254	36.2	39	1.1	422	12.2

TABLE 3-3

Detailed primary source of federal support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	DOD		DOE		HHS: NIH		HHS: Other HHS		NASA		NSF		USDA		Other	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Metallurgical, mining, materials and related engineering fields	1,616	314	19.4	367	22.7	48	3.0	70	4.3	45	2.8	578	35.8	13	0.8	181	11.2
Other engineering	2,041	296	14.5	490	24.0	173	8.5	102	5.0	52	2.5	547	26.8	130	6.4	251	12.3
Health	2,145	97	4.5	0	0.0	1,261	58.8	368	17.2	0	0.0	73	3.4	8	0.4	338	15.8
Clinical medicine ^a	747	29	3.9	0	0.0	387	51.8	163	21.8	0	0.0	21	2.8	7	0.9	140	18.7
Other health	1,398	68	4.9	0	0.0	874	62.5	205	14.7	0	0.0	52	3.7	1	0.1	198	14.2

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 3-4

Detailed primary source of federal support for postdoctoral appointees in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	DOD		DOE		HHS: NIH		HHS: Other HHS		NASA		NSF		USDA		Other	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All surveyed fields	32,155	2,304	7.2	2,172	6.8	18,732	58.3	841	2.6	724	2.3	3,853	12.0	1,104	3.4	2,425	7.5
Science	18,913	1,031	5.5	1,399	7.4	9,948	52.6	424	2.2	617	3.3	2,925	15.5	997	5.3	1,572	8.3
Agricultural and veterinary sciences	853	19	2.2	22	2.6	194	22.7	5	0.6	5	0.6	71	8.3	451	52.9	86	10.1
Biological and biomedical sciences	10,520	331	3.1	167	1.6	7,905	75.1	257	2.4	30	0.3	851	8.1	351	3.3	628	6.0
Computer and information sciences	437	111	25.4	18	4.1	54	12.4	9	2.1	4	0.9	208	47.6	1	0.2	32	7.3
Geosciences, atmospheric, and ocean sciences	928	56	6.0	43	4.6	55	5.9	5	0.5	171	18.4	357	38.5	25	2.7	216	23.3
Mathematics and statistics	306	59	19.3	25	8.2	53	17.3	6	2.0	3	1.0	131	42.8	1	0.3	28	9.2
Multidisciplinary and interdisciplinary sciences	416	40	9.6	15	3.6	221	53.1	16	3.8	7	1.7	70	16.8	6	1.4	41	9.9
Natural resources and conservation	437	15	3.4	37	8.5	12	2.7	4	0.9	27	6.2	95	21.7	110	25.2	137	31.4
Physical sciences	3,924	364	9.3	1,061	27.0	860	21.9	72	1.8	357	9.1	930	23.7	5	0.1	275	7.0
Psychology	719	21	2.9	1	0.1	494	68.7	34	4.7	0	0.0	100	13.9	14	1.9	55	7.6
Social sciences	373	15	4.0	10	2.7	100	26.8	16	4.3	13	3.5	112	30.0	33	8.8	74	19.8
Engineering	4,431	980	22.1	752	17.0	1,083	24.4	93	2.1	100	2.3	870	19.6	93	2.1	460	10.4
Aerospace, aeronautical, and astronautical engineering	134	50	37.3	22	16.4	4	3.0	0	0.0	18	13.4	30	22.4	0	0.0	10	7.5
Biological, biomedical, and biosystems engineering	881	67	7.6	20	2.3	631	71.6	23	2.6	3	0.3	70	7.9	12	1.4	55	6.2
Chemical, petroleum, and chemical-related engineering	689	92	13.4	233	33.8	119	17.3	43	6.2	8	1.2	143	20.8	8	1.2	43	6.2
Civil, environmental, transportation and related engineering fields	447	81	18.1	73	16.3	25	5.6	5	1.1	14	3.1	117	26.2	17	3.8	115	25.7
Electrical, electronics, communications and computer engineering	693	255	36.8	74	10.7	102	14.7	7	1.0	16	2.3	181	26.1	2	0.3	56	8.1
Industrial, manufacturing, systems engineering and operations research	61	15	24.6	4	6.6	7	11.5	1	1.6	0	0.0	23	37.7	1	1.6	10	16.4
Mechanical engineering	655	196	29.9	118	18.0	97	14.8	6	0.9	27	4.1	140	21.4	3	0.5	68	10.4
Metallurgical, mining, materials and related engineering fields	277	85	30.7	82	29.6	10	3.6	2	0.7	5	1.8	62	22.4	6	2.2	25	9.0
Other engineering	594	139	23.4	126	21.2	88	14.8	6	1.0	9	1.5	104	17.5	44	7.4	78	13.1
Health	8,811	293	3.3	21	0.2	7,701	87.4	324	3.7	7	0.1	58	0.7	14	0.2	393	4.5
Clinical medicine ^a	7,678	248	3.2	18	0.2	6,788	88.4	238	3.1	7	0.1	49	0.6	2	*	328	4.3
Other health	1,133	45	4.0	3	0.3	913	80.6	86	7.6	0	0.0	9	0.8	12	1.1	65	5.7

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Clinical medicine includes postdoctoral appointees in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.**Note(s):**For postdoctoral appointees, "field" refers to the field of the unit that reports information on this group to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 3-5

Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Fellowships		Research assistantships		Teaching assistantships		Traineeships		Other types of support			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
All graduate students	598,588	50,387	8.4	133,930	22.4	85,312	14.3	11,872	2.0	254,087	42.4	63,000	10.5
Science	411,971	36,620	8.9	83,882	20.4	67,383	16.4	9,482	2.3	173,046	42.0	41,558	10.1
Agricultural and veterinary sciences	8,319	409	4.9	4,841	58.2	979	11.8	19	0.2	1,455	17.5	616	7.4
Biological and biomedical sciences	86,153	11,079	12.9	29,416	34.1	10,499	12.2	5,981	6.9	20,767	24.1	8,411	9.8
Computer and information sciences	113,633	3,572	3.1	11,313	10.0	9,443	8.3	551	0.5	76,060	66.9	12,694	11.2
Geosciences, atmospheric, and ocean sciences	9,519	1,060	11.1	4,334	45.5	2,339	24.6	87	0.9	1,156	12.1	543	5.7
Mathematics and statistics	26,832	2,036	7.6	2,762	10.3	8,923	33.3	173	0.6	10,808	40.3	2,130	7.9
Multidisciplinary and interdisciplinary sciences	17,187	1,662	9.7	1,570	9.1	1,336	7.8	125	0.7	10,320	60.0	2,174	12.6
Natural resources and conservation	9,028	883	9.8	2,728	30.2	1,379	15.3	130	1.4	2,762	30.6	1,146	12.7
Physical sciences	39,475	5,101	12.9	15,691	39.7	13,491	34.2	563	1.4	2,776	7.0	1,853	4.7
Psychology	47,479	2,129	4.5	5,105	10.8	5,984	12.6	848	1.8	27,845	58.6	5,568	11.7
Social sciences	54,346	8,689	16.0	6,122	11.3	13,010	23.9	1,005	1.8	19,097	35.1	6,423	11.8
Engineering	131,607	11,315	8.6	44,660	33.9	14,003	10.6	1,229	0.9	47,028	35.7	13,372	10.2
Aerospace, aeronautical, and astronautical engineering	5,447	475	8.7	2,065	37.9	691	12.7	44	0.8	1,484	27.2	688	12.6
Biological, biomedical, and biosystems engineering	13,267	1,899	14.3	5,505	41.5	1,043	7.9	461	3.5	2,854	21.5	1,505	11.3
Chemical, petroleum, and chemical-related engineering	9,328	1,543	16.5	4,689	50.3	1,086	11.6	47	0.5	1,367	14.7	596	6.4
Civil, environmental, transportation and related engineering fields	14,930	1,204	8.1	5,185	34.7	1,789	12.0	72	0.5	5,124	34.3	1,556	10.4
Electrical, electronics, communications and computer engineering	37,357	2,150	5.8	10,202	27.3	3,822	10.2	217	0.6	17,279	46.3	3,687	9.9
Industrial, manufacturing, systems engineering and operations research	9,291	519	5.6	1,703	18.3	916	9.9	45	0.5	4,761	51.2	1,347	14.5
Mechanical engineering	20,323	1,576	7.8	7,320	36.0	2,915	14.3	182	0.9	6,224	30.6	2,106	10.4
Metallurgical, mining, materials and related engineering fields	5,990	732	12.2	3,126	52.2	586	9.8	37	0.6	1,093	18.2	416	6.9
Other engineering	15,674	1,217	7.8	4,865	31.0	1,155	7.4	124	0.8	6,842	43.7	1,471	9.4
Health	55,010	2,452	4.5	5,388	9.8	3,926	7.1	1,161	2.1	34,013	61.8	8,070	14.7
Clinical medicine ^a	20,426	1,273	6.2	1,946	9.5	1,092	5.3	650	3.2	12,308	60.3	3,157	15.5
Other health	34,584	1,179	3.4	3,442	10.0	2,834	8.2	511	1.5	21,705	62.8	4,913	14.2
Master's students	329,971	8,749	2.7	23,225	7.0	23,509	7.1	2,256	0.7	229,119	69.4	43,113	13.1
Science	222,976	5,585	2.5	14,565	6.5	16,743	7.5	1,322	0.6	156,478	70.2	28,283	12.7
Agricultural and veterinary sciences	4,186	104	2.5	2,022	48.3	445	10.6	3	0.1	1,195	28.5	417	10.0
Biological and biomedical sciences	29,180	567	1.9	2,885	9.9	2,967	10.2	163	0.6	18,681	64.0	3,917	13.4
Computer and information sciences	94,517	1,078	1.1	2,926	3.1	4,597	4.9	255	0.3	74,204	78.5	11,457	12.1
Geosciences, atmospheric, and ocean sciences	3,376	108	3.2	1,149	34.0	1,026	30.4	8	0.2	853	25.3	232	6.9
Mathematics and statistics	14,237	269	1.9	453	3.2	1,809	12.7	37	0.3	10,100	70.9	1,569	11.0
Multidisciplinary and interdisciplinary sciences	13,413	773	5.8	484	3.6	555	4.1	40	0.3	9,782	72.9	1,779	13.3
Natural resources and conservation	5,764	396	6.9	1,313	22.8	666	11.6	106	1.8	2,393	41.5	890	15.4

TABLE 3-5

Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Fellowships		Research assistantships		Teaching assistantships		Traineeships		Other types of support			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
Physical sciences	3,471	95	2.7	466	13.4	920	26.5	68	2.0	1,549	44.6	373	10.7
Psychology	28,571	255	0.9	1,077	3.8	1,191	4.2	262	0.9	22,150	77.5	3,636	12.7
Social sciences	26,261	1,940	7.4	1,790	6.8	2,567	9.8	380	1.4	15,571	59.3	4,013	15.3
Engineering	65,160	1,902	2.9	6,833	10.5	4,688	7.2	390	0.6	42,838	65.7	8,509	13.1
Aerospace, aeronautical, and astronautical engineering	2,883	91	3.2	604	21.0	349	12.1	34	1.2	1,300	45.1	505	17.5
Biological, biomedical, and biosystems engineering	3,961	164	4.1	442	11.2	367	9.3	8	0.2	2,509	63.3	471	11.9
Chemical, petroleum, and chemical-related engineering	1,827	94	5.1	223	12.2	169	9.3	7	0.4	1,098	60.1	236	12.9
Civil, environmental, transportation and related engineering fields	7,984	358	4.5	1,267	15.9	727	9.1	27	0.3	4,544	56.9	1,061	13.3
Electrical, electronics, communications and computer engineering	21,886	332	1.5	1,406	6.4	1,399	6.4	99	0.5	16,111	73.6	2,539	11.6
Industrial, manufacturing, systems engineering and operations research	6,287	125	2.0	352	5.6	249	4.0	39	0.6	4,456	70.9	1,066	17.0
Mechanical engineering	9,861	290	2.9	1,416	14.4	924	9.4	90	0.9	5,633	57.1	1,508	15.3
Metallurgical, mining, materials and related engineering fields	1,619	85	5.3	385	23.8	129	8.0	2	0.1	850	52.5	168	10.4
Other engineering	8,852	363	4.1	738	8.3	375	4.2	84	0.9	6,337	71.6	955	10.8
Health	41,835	1,262	3.0	1,827	4.4	2,078	5.0	544	1.3	29,803	71.2	6,321	15.1
Clinical medicine ^a	16,700	904	5.4	755	4.5	694	4.2	336	2.0	11,418	68.4	2,593	15.5
Other health	25,135	358	1.4	1,072	4.3	1,384	5.5	208	0.8	18,385	73.1	3,728	14.8
Doctoral students	268,617	41,638	15.5	110,705	41.2	61,803	23.0	9,616	3.6	24,968	9.3	19,887	7.4
Science	188,995	31,035	16.4	69,317	36.7	50,640	26.8	8,160	4.3	16,568	8.8	13,275	7.0
Agricultural and veterinary sciences	4,133	305	7.4	2,819	68.2	534	12.9	16	0.4	260	6.3	199	4.8
Biological and biomedical sciences	56,973	10,512	18.5	26,531	46.6	7,532	13.2	5,818	10.2	2,086	3.7	4,494	7.9
Computer and information sciences	19,116	2,494	13.0	8,387	43.9	4,846	25.4	296	1.5	1,856	9.7	1,237	6.5
Geosciences, atmospheric, and ocean sciences	6,143	952	15.5	3,185	51.8	1,313	21.4	79	1.3	303	4.9	311	5.1
Mathematics and statistics	12,595	1,767	14.0	2,309	18.3	7,114	56.5	136	1.1	708	5.6	561	4.5
Multidisciplinary and interdisciplinary sciences	3,774	889	23.6	1,086	28.8	781	20.7	85	2.3	538	14.3	395	10.5
Natural resources and conservation	3,264	487	14.9	1,415	43.4	713	21.8	24	0.7	369	11.3	256	7.8
Physical sciences	36,004	5,006	13.9	15,225	42.3	12,571	34.9	495	1.4	1,227	3.4	1,480	4.1
Psychology	18,908	1,874	9.9	4,028	21.3	4,793	25.3	586	3.1	5,695	30.1	1,932	10.2
Social sciences	28,085	6,749	24.0	4,332	15.4	10,443	37.2	625	2.2	3,526	12.6	2,410	8.6
Engineering	66,447	9,413	14.2	37,827	56.9	9,315	14.0	839	1.3	4,190	6.3	4,863	7.3
Aerospace, aeronautical, and astronautical engineering	2,564	384	15.0	1,461	57.0	342	13.3	10	0.4	184	7.2	183	7.1
Biological, biomedical, and biosystems engineering	9,306	1,735	18.6	5,063	54.4	676	7.3	453	4.9	345	3.7	1,034	11.1
Chemical, petroleum, and chemical-related engineering	7,501	1,449	19.3	4,466	59.5	917	12.2	40	0.5	269	3.6	360	4.8
Civil, environmental, transportation and related engineering fields	6,946	846	12.2	3,918	56.4	1,062	15.3	45	0.6	580	8.4	495	7.1
Electrical, electronics, communications and computer engineering	15,471	1,818	11.8	8,796	56.9	2,423	15.7	118	0.8	1,168	7.5	1,148	7.4

TABLE 3-5

Primary mechanism of support for full-time graduate students in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Fellowships		Research assistantships		Teaching assistantships		Traineeships		Other types of support			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Self-support		Other	
										Number	Percent	Number	Percent
Industrial, manufacturing, systems engineering and operations research	3,004	394	13.1	1,351	45.0	667	22.2	6	0.2	305	10.2	281	9.4
Mechanical engineering	10,462	1,286	12.3	5,904	56.4	1,991	19.0	92	0.9	591	5.6	598	5.7
Metallurgical, mining, materials and related engineering fields	4,371	647	14.8	2,741	62.7	457	10.5	35	0.8	243	5.6	248	5.7
Other engineering	6,822	854	12.5	4,127	60.5	780	11.4	40	0.6	505	7.4	516	7.6
Health	13,175	1,190	9.0	3,561	27.0	1,848	14.0	617	4.7	4,210	32.0	1,749	13.3
Clinical medicine ^a	3,726	369	9.9	1,191	32.0	398	10.7	314	8.4	890	23.9	564	15.1
Other health	9,449	821	8.7	2,370	25.1	1,450	15.3	303	3.2	3,320	35.1	1,185	12.5

^a Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 3-6

Primary mechanism of support for postdoctoral appointees in science, engineering, and health, by broad field: 2023

(Number and percent)

Broad field	Total	Fellowships		Research grants		Traineeships		Other types of support	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
All surveyed fields	65,850	6,073	9.2	40,789	61.9	3,378	5.1	15,610	23.7
Science	37,982	3,373	8.9	24,532	64.6	1,641	4.3	8,436	22.2
Agricultural and veterinary sciences	1,993	149	7.5	1,205	60.5	117	5.9	522	26.2
Biological and biomedical sciences	19,520	1,602	8.2	12,644	64.8	926	4.7	4,348	22.3
Computer and information sciences	987	82	8.3	673	68.2	21	2.1	211	21.4
Geosciences, atmospheric, and ocean sciences	1,919	191	10.0	1,313	68.4	36	1.9	379	19.7
Mathematics and statistics	1,220	150	12.3	455	37.3	93	7.6	522	42.8
Multidisciplinary and interdisciplinary sciences	988	102	10.3	594	60.1	38	3.8	254	25.7
Natural resources and conservation	937	59	6.3	657	70.1	19	2.0	202	21.6
Physical sciences	7,220	646	8.9	5,243	72.6	181	2.5	1,150	15.9
Psychology	1,344	116	8.6	806	60.0	112	8.3	310	23.1
Social sciences	1,854	276	14.9	942	50.8	98	5.3	538	29.0
Engineering	9,051	612	6.8	6,653	73.5	184	2.0	1,602	17.7
Aerospace, aeronautical, and astronautical engineering	254	22	8.7	173	68.1	1	0.4	58	22.8
Biological, biomedical, and biosystems engineering	1,594	115	7.2	1,108	69.5	67	4.2	304	19.1
Chemical, petroleum, and chemical-related engineering	1,501	119	7.9	1,108	73.8	18	1.2	256	17.1
Civil, environmental, transportation and related engineering fields	1,070	77	7.2	809	75.6	13	1.2	171	16.0
Electrical, electronics, communications and computer engineering	1,339	83	6.2	1,030	76.9	24	1.8	202	15.1
Industrial, manufacturing, systems engineering and operations research	170	15	8.8	110	64.7	4	2.4	41	24.1
Mechanical engineering	1,317	96	7.3	942	71.5	31	2.4	248	18.8
Metallurgical, mining, materials and related engineering fields	557	24	4.3	441	79.2	1	0.2	91	16.3
Other engineering	1,249	61	4.9	932	74.6	25	2.0	231	18.5
Health	18,817	2,088	11.1	9,604	51.0	1,553	8.3	5,572	29.6
Clinical medicine ^a	16,393	1,803	11.0	8,364	51.0	1,378	8.4	4,848	29.6
Other health	2,424	285	11.8	1,240	51.2	175	7.2	724	29.9

^a Clinical medicine includes postdoctoral appointees in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.

Note(s):

For postdoctoral appointees, "field" refers to the field of the unit that reports information on this group to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-1

Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2023

(Number and percent)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All detailed fields	818,095	100.0	510,866	100.0	307,229	100.0	65,850	100.0	34,342	100.0
Science	561,489	68.6	348,520	68.2	212,969	69.3	37,982	57.7	20,600	60.0
Agricultural and veterinary sciences	11,755	1.4	6,901	1.4	4,854	1.6	1,993	3.0	1,238	3.6
Agricultural sciences	10,572	1.3	6,218	1.2	4,354	1.4	1,279	1.9	824	2.4
Veterinary biomedical and clinical sciences	1,183	0.1	683	0.1	500	0.2	714	1.1	414	1.2
Biological and biomedical sciences	105,566	12.9	44,703	8.8	60,863	19.8	19,520	29.6	8,589	25.0
Biochemistry	5,763	0.7	778	0.2	4,985	1.6	1,684	2.6	841	2.4
Biology	15,531	1.9	7,988	1.6	7,543	2.5	2,036	3.1	772	2.2
Biomedical sciences	11,806	1.4	6,391	1.3	5,415	1.8	1,602	2.4	571	1.7
Biophysics	952	0.1	9	*	943	0.3	151	0.2	79	0.2
Biostatistics and bioinformatics	8,283	1.0	4,240	0.8	4,043	1.3	739	1.1	366	1.1
Biotechnology	4,543	0.6	4,420	0.9	123	*	160	0.2	96	0.3
Botany and plant biology	1,677	0.2	378	0.1	1,299	0.4	490	0.7	227	0.7
Cell, cellular biology, and anatomical sciences	6,478	0.8	1,031	0.2	5,447	1.8	1,583	2.4	675	2.0
Ecology and population biology	3,833	0.5	1,035	0.2	2,798	0.9	461	0.7	236	0.7
Epidemiology	6,138	0.8	3,837	0.8	2,301	0.7	391	0.6	145	0.4
Genetics	3,187	0.4	693	0.1	2,494	0.8	1,329	2.0	557	1.6
Microbiological sciences and immunology	6,588	0.8	1,934	0.4	4,654	1.5	1,826	2.8	718	2.1
Molecular biology	1,668	0.2	388	0.1	1,280	0.4	507	0.8	222	0.6
Neurobiology and neuroscience	6,580	0.8	480	0.1	6,100	2.0	1,949	3.0	920	2.7
Nutrition science	4,068	0.5	2,959	0.6	1,109	0.4	156	0.2	100	0.3
Pathology and experimental pathology	1,106	0.1	143	*	963	0.3	904	1.4	329	1.0
Pharmacology and toxicology	3,304	0.4	844	0.2	2,460	0.8	886	1.3	358	1.0
Physiology	6,101	0.7	2,951	0.6	3,150	1.0	1,468	2.2	708	2.1
Zoology and animal biology	2,042	0.2	901	0.2	1,141	0.4	391	0.6	196	0.6
Biological and biomedical sciences nec	5,918	0.7	3,303	0.6	2,615	0.9	807	1.2	473	1.4
Computer and information sciences	166,014	20.3	143,530	28.1	22,484	7.3	987	1.5	631	1.8
Artificial intelligence, informatics, and computer and information science topics	7,375	0.9	6,433	1.3	942	0.3	52	0.1	52	0.2
Computer and information sciences	49,206	6.0	41,959	8.2	7,247	2.4	237	0.4	217	0.6
Computer and information systems security	11,498	1.4	10,774	2.1	724	0.2	8	*	16	*
Computer science	57,819	7.1	46,477	9.1	11,342	3.7	524	0.8	194	0.6
Information science and studies	17,660	2.2	16,138	3.2	1,522	0.5	66	0.1	44	0.1
Information technology	15,074	1.8	14,484	2.8	590	0.2	2	*	16	*
Computer and information sciences nec	7,382	0.9	7,265	1.4	117	*	98	0.1	92	0.3

TABLE 4-1

Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2023

(Number and percent)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Geosciences, atmospheric, and ocean sciences	11,594	1.4	4,793	0.9	6,801	2.2	1,919	2.9	2,455	7.1
Atmospheric sciences and meteorology	1,431	0.2	441	0.1	990	0.3	245	0.4	512	1.5
Geological and earth sciences	7,240	0.9	2,984	0.6	4,256	1.4	922	1.4	1,247	3.6
Ocean and marine sciences	2,923	0.4	1,368	0.3	1,555	0.5	444	0.7	418	1.2
Geosciences, atmospheric, and ocean sciences nec	ne	ne	ne	ne	ne	ne	308	0.5	278	0.8
Mathematics and statistics	33,893	4.1	20,105	3.9	13,788	4.5	1,220	1.9	307	0.9
Applied mathematics	11,140	1.4	8,977	1.8	2,163	0.7	203	0.3	99	0.3
Mathematics	11,801	1.4	3,623	0.7	8,178	2.7	813	1.2	142	0.4
Statistics	10,952	1.3	7,505	1.5	3,447	1.1	204	0.3	66	0.2
Multidisciplinary and interdisciplinary sciences	26,429	3.2	21,928	4.3	4,501	1.5	988	1.5	818	2.4
Biological and physical sciences	1,896	0.2	921	0.2	975	0.3	48	0.1	42	0.1
Computational science	3,228	0.4	2,939	0.6	289	0.1	26	*	58	0.2
Data science and data analytics	10,416	1.3	10,243	2.0	173	0.1	98	0.1	56	0.2
International and global studies	996	0.1	865	0.2	131	*	27	*	15	*
Multidisciplinary and interdisciplinary sciences nec	9,893	1.2	6,960	1.4	2,933	1.0	789	1.2	647	1.9
Natural resources and conservation	13,490	1.6	9,486	1.9	4,004	1.3	937	1.4	663	1.9
Environmental science and studies	6,348	0.8	4,359	0.9	1,989	0.6	357	0.5	226	0.7
Forestry, natural resources, and conservation	7,142	0.9	5,127	1.0	2,015	0.7	580	0.9	437	1.3
Physical sciences	44,329	5.4	6,000	1.2	38,329	12.5	7,220	11.0	3,095	9.0
Astronomy and astrophysics	1,657	0.2	100	*	1,557	0.5	725	1.1	600	1.7
Chemistry	23,007	2.8	2,891	0.6	20,116	6.5	3,288	5.0	845	2.5
Materials sciences	1,571	0.2	373	0.1	1,198	0.4	247	0.4	69	0.2
Physics	17,119	2.1	2,179	0.4	14,940	4.9	2,723	4.1	1,210	3.5
Physical sciences nec	975	0.1	457	0.1	518	0.2	237	0.4	371	1.1
Psychology	73,828	9.0	49,474	9.7	24,354	7.9	1,344	2.0	950	2.8
Applied psychology	25,198	3.1	20,430	4.0	4,768	1.6	105	0.2	118	0.3
Clinical psychology	7,873	1.0	4,603	0.9	3,270	1.1	59	0.1	20	0.1
Counseling psychology	16,071	2.0	13,161	2.6	2,910	0.9	9	*	8	*
Human development	2,080	0.3	1,321	0.3	759	0.2	130	0.2	158	0.5
Psychology, general	14,928	1.8	7,321	1.4	7,607	2.5	768	1.2	472	1.4
Research and experimental psychology	7,678	0.9	2,638	0.5	5,040	1.6	273	0.4	174	0.5
Social sciences	74,591	9.1	41,600	8.1	32,991	10.7	1,854	2.8	1,854	5.4
Agricultural and natural resource economics	740	0.1	436	0.1	304	0.1	72	0.1	51	0.1
Anthropology	5,796	0.7	1,971	0.4	3,825	1.2	152	0.2	70	0.2

TABLE 4-1

Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2023

(Number and percent)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Area, ethnic, cultural, gender, and group studies	4,920	0.6	2,582	0.5	2,338	0.8	273	0.4	143	0.4
Criminal justice and safety studies	6,424	0.8	4,942	1.0	1,482	0.5	19	*	22	0.1
Criminology	1,477	0.2	1,161	0.2	316	0.1	8	*	10	*
Economics (except agricultural and natural resource)	14,559	1.8	6,398	1.3	8,161	2.7	147	0.2	152	0.4
Geography and cartography	3,837	0.5	2,517	0.5	1,320	0.4	141	0.2	118	0.3
International relations and national security studies	7,473	0.9	7,147	1.4	326	0.1	119	0.2	139	0.4
Linguistics	2,727	0.3	1,117	0.2	1,610	0.5	51	0.1	59	0.2
Political science and government	7,684	0.9	2,649	0.5	5,035	1.6	173	0.3	93	0.3
Public policy analysis	7,370	0.9	4,645	0.9	2,725	0.9	305	0.5	475	1.4
Sociology and population studies	6,404	0.8	1,888	0.4	4,516	1.5	189	0.3	196	0.6
Urban studies and affairs	966	0.1	648	0.1	318	0.1	7	*	21	0.1
Social sciences, other	4,214	0.5	3,499	0.7	715	0.2	198	0.3	305	0.9
Engineering	175,559	21.5	100,567	19.7	74,992	24.4	9,051	13.7	4,575	13.3
Aerospace, aeronautical, and astronautical engineering	8,264	1.0	5,380	1.1	2,884	0.9	254	0.4	166	0.5
Biological, biomedical, and biosystems engineering	15,203	1.9	5,204	1.0	9,999	3.3	1,594	2.4	674	2.0
Chemical, petroleum, and chemical-related engineering	10,546	1.3	2,658	0.5	7,888	2.6	1,501	2.3	349	1.0
Chemical engineering	9,701	1.2	2,271	0.4	7,430	2.4	1,471	2.2	303	0.9
Petroleum engineering	845	0.1	387	0.1	458	0.1	30	*	46	0.1
Civil, environmental, transportation and related engineering fields	19,934	2.4	12,082	2.4	7,852	2.6	1,070	1.6	654	1.9
Civil engineering	15,851	1.9	9,149	1.8	6,702	2.2	960	1.5	571	1.7
Architectural, environmental, construction and surveying engineering	4,083	0.5	2,933	0.6	1,150	0.4	110	0.2	83	0.2
Electrical, electronics, communications and computer engineering	48,799	6.0	31,093	6.1	17,706	5.8	1,339	2.0	799	2.3
Electrical, electronics, and communications engineering	32,988	4.0	18,215	3.6	14,773	4.8	1,257	1.9	731	2.1
Computer engineering	15,811	1.9	12,878	2.5	2,933	1.0	82	0.1	68	0.2
Industrial, manufacturing, systems engineering and operations research	15,762	1.9	11,873	2.3	3,889	1.3	170	0.3	221	0.6
Industrial and manufacturing engineering	8,113	1.0	5,821	1.1	2,292	0.7	107	0.2	83	0.2
Systems engineering and operations research	7,649	0.9	6,052	1.2	1,597	0.5	63	0.1	138	0.4
Mechanical engineering	27,014	3.3	15,335	3.0	11,679	3.8	1,317	2.0	560	1.6
Metallurgical, mining, materials and related engineering fields	7,244	0.9	2,462	0.5	4,782	1.6	557	0.8	249	0.7
Other engineering	22,793	2.8	14,480	2.8	8,313	2.7	1,249	1.9	903	2.6
Agricultural engineering	1,032	0.1	377	0.1	655	0.2	154	0.2	53	0.2
Engineering mechanics, physics, and science	2,390	0.3	696	0.1	1,694	0.6	291	0.4	190	0.6
Nuclear engineering	1,606	0.2	516	0.1	1,090	0.4	103	0.2	35	0.1
Engineering, other	17,765	2.2	12,891	2.5	4,874	1.6	701	1.1	625	1.8

TABLE 4-1

Distribution of graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers across science, engineering, and health fields: 2023

(Number and percent)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent				
Health	81,047	9.9	61,779	12.1	19,268	6.3	18,817	28.6	9,167	26.7
Clinical medicine	34,658	4.2	28,484	5.6	6,174	2.0	16,393	24.9	7,798	22.7
Medical clinical sciences and clinical and medical laboratory sciences	2,117	0.3	1,242	0.2	875	0.3	521	0.8	477	1.4
Public health	32,541	4.0	27,242	5.3	5,299	1.7	848	1.3	911	2.7
Anesthesiology	ne	ne	ne	ne	ne	ne	366	0.6	129	0.4
Cardiology and cardiovascular disease	ne	ne	ne	ne	ne	ne	679	1.0	228	0.7
Endocrinology, diabetes, and metabolism	ne	ne	ne	ne	ne	ne	314	0.5	122	0.4
Gastroenterology	ne	ne	ne	ne	ne	ne	296	0.4	89	0.3
Hematology	ne	ne	ne	ne	ne	ne	354	0.5	168	0.5
Neurology and neurosurgery	ne	ne	ne	ne	ne	ne	1,715	2.6	533	1.6
Obstetrics and gynecology	ne	ne	ne	ne	ne	ne	274	0.4	121	0.4
Oncology and cancer research	ne	ne	ne	ne	ne	ne	1,512	2.3	587	1.7
Ophthalmology	ne	ne	ne	ne	ne	ne	537	0.8	295	0.9
Otorhinolaryngology	ne	ne	ne	ne	ne	ne	279	0.4	148	0.4
Pediatrics	ne	ne	ne	ne	ne	ne	1,134	1.7	743	2.2
Psychiatry	ne	ne	ne	ne	ne	ne	1,031	1.6	346	1.0
Pulmonary disease	ne	ne	ne	ne	ne	ne	258	0.4	118	0.3
Radiological sciences	ne	ne	ne	ne	ne	ne	1,359	2.1	465	1.4
Surgery	ne	ne	ne	ne	ne	ne	1,275	1.9	608	1.8
Clinical medicine nec	ne	ne	ne	ne	ne	ne	3,641	5.5	1,710	5.0
Other health	46,389	5.7	33,295	6.5	13,094	4.3	2,424	3.7	1,369	4.0
Communication disorders sciences	19,109	2.3	18,183	3.6	926	0.3	94	0.1	85	0.2
Dental sciences	2,231	0.3	1,420	0.3	811	0.3	310	0.5	159	0.5
Kinesiology and exercise science	5,254	0.6	4,286	0.8	968	0.3	83	0.1	50	0.1
Nursing science	5,510	0.7	1,701	0.3	3,809	1.2	154	0.2	187	0.5
Pharmaceutical sciences	5,219	0.6	2,265	0.4	2,954	1.0	1,295	2.0	469	1.4
Other health nec	9,066	1.1	5,440	1.1	3,626	1.2	488	0.7	419	1.2

* = value < 0.05%; ne = not eligible.

nec = not elsewhere classified.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):
National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2023

(Number and percent)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
All detailed fields	818,095	48.4	510,866	49.4	307,229	46.7	65,850	43.1	34,342	43.2
Science	561,489	50.6	348,520	50.5	212,969	50.6	37,982	42.9	20,600	42.4
Agricultural and veterinary sciences	11,755	59.6	6,901	63.0	4,854	54.9	1,993	48.9	1,238	49.5
Agricultural sciences	10,572	58.5	6,218	61.3	4,354	54.5	1,279	42.3	824	45.3
Veterinary biomedical and clinical sciences	1,183	70.2	683	78.9	500	58.2	714	60.6	414	58.0
Biological and biomedical sciences	105,566	62.6	44,703	67.4	60,863	59.1	19,520	47.5	8,589	47.4
Biochemistry	5,763	54.3	778	57.1	4,985	53.8	1,684	43.2	841	41.7
Biology	15,531	61.9	7,988	64.7	7,543	59.1	2,036	45.6	772	49.7
Biomedical sciences	11,806	66.3	6,391	69.8	5,415	62.2	1,602	50.5	571	49.6
Biophysics	952	42.0	9	44.4	943	42.0	151	45.0	79	26.6
Biostatistics and bioinformatics	8,283	53.0	4,240	58.5	4,043	47.2	739	39.5	366	47.8
Biotechnology	4,543	62.2	4,420	62.3	123	59.3	160	41.9	96	41.7
Botany and plant biology	1,677	56.5	378	60.1	1,299	55.5	490	46.7	227	45.8
Cell, cellular biology, and anatomical sciences	6,478	60.7	1,031	66.4	5,447	59.6	1,583	48.3	675	45.0
Ecology and population biology	3,833	61.7	1,035	64.4	2,798	60.7	461	49.7	236	47.0
Epidemiology	6,138	72.7	3,837	74.6	2,301	69.4	391	63.2	145	67.6
Genetics	3,187	64.4	693	79.4	2,494	60.3	1,329	45.4	557	46.7
Microbiological sciences and immunology	6,588	64.1	1,934	72.0	4,654	60.8	1,826	51.2	718	48.9
Molecular biology	1,668	59.5	388	68.3	1,280	56.8	507	48.1	222	37.8
Neurobiology and neuroscience	6,580	62.1	480	66.5	6,100	61.8	1,949	46.7	920	46.3
Nutrition science	4,068	84.0	2,959	86.7	1,109	77.0	156	66.7	100	63.0
Pathology and experimental pathology	1,106	65.1	143	74.1	963	63.8	904	46.6	329	51.4
Pharmacology and toxicology	3,304	61.4	844	65.0	2,460	60.2	886	47.7	358	45.0
Physiology	6,101	59.1	2,951	60.6	3,150	57.7	1,468	49.0	708	49.9
Zoology and animal biology	2,042	58.3	901	60.2	1,141	56.8	391	44.2	196	45.9
Biological and biomedical sciences nec	5,918	66.3	3,303	70.3	2,615	61.2	807	47.2	473	51.0
Computer and information sciences	166,014	33.1	143,530	33.9	22,484	28.4	987	27.9	631	27.4
Artificial intelligence, informatics, and computer and information science topics	7,375	37.2	6,433	37.2	942	36.9	52	38.5	52	28.8
Computer and information sciences	49,206	30.1	41,959	31.0	7,247	24.9	237	26.2	217	28.6
Computer and information systems security	11,498	27.6	10,774	27.7	724	25.1	8	50.0	16	18.8
Computer science	57,819	29.8	46,477	30.8	11,342	26.0	524	24.0	194	25.8
Information science and studies	17,660	46.3	16,138	45.7	1,522	52.0	66	47.0	44	36.4
Information technology	15,074	40.6	14,484	40.4	590	45.9	2	100.0	16	43.8
Computer and information sciences nec	7,382	36.9	7,265	37.0	117	33.3	98	30.6	92	21.7

TABLE 4-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2023

(Number and percent)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
Geosciences, atmospheric, and ocean sciences	11,594	52.4	4,793	54.5	6,801	50.9	1,919	41.6	2,455	34.7
Atmospheric sciences and meteorology	1,431	43.5	441	46.3	990	42.3	245	33.9	512	29.3
Geological and earth sciences	7,240	49.5	2,984	49.6	4,256	49.4	922	39.2	1,247	33.6
Ocean and marine sciences	2,923	63.9	1,368	67.9	1,555	60.4	444	47.5	418	44.3
Geosciences, atmospheric, and ocean sciences nec	ne	ne	ne	ne	ne	ne	308	46.8	278	34.9
Mathematics and statistics	33,893	35.3	20,105	38.9	13,788	30.0	1,220	23.4	307	30.3
Applied mathematics	11,140	35.6	8,977	36.2	2,163	33.1	203	25.1	99	23.2
Mathematics	11,801	30.9	3,623	40.2	8,178	26.8	813	22.8	142	28.2
Statistics	10,952	39.7	7,505	41.5	3,447	35.6	204	24.5	66	45.5
Multidisciplinary and interdisciplinary sciences	26,429	49.4	21,928	48.2	4,501	55.2	988	44.1	818	39.2
Biological and physical sciences	1,896	55.8	921	57.9	975	53.8	48	54.2	42	26.2
Computational science	3,228	36.7	2,939	37.4	289	30.1	26	26.9	58	29.3
Data science and data analytics	10,416	36.8	10,243	36.9	173	33.5	98	40.8	56	41.1
International and global studies	996	66.2	865	67.4	131	58.0	27	63.0	15	53.3
Multidisciplinary and interdisciplinary sciences nec	9,893	63.8	6,960	65.6	2,933	59.3	789	43.9	647	40.5
Natural resources and conservation	13,490	59.7	9,486	60.4	4,004	57.9	937	47.2	663	40.3
Environmental science and studies	6,348	61.4	4,359	61.9	1,989	60.4	357	50.4	226	43.8
Forestry, natural resources, and conservation	7,142	58.1	5,127	59.1	2,015	55.4	580	45.2	437	38.4
Physical sciences	44,329	37.6	6,000	39.9	38,329	37.2	7,220	26.9	3,095	23.4
Astronomy and astrophysics	1,657	47.6	100	49.0	1,557	47.5	725	35.7	600	25.3
Chemistry	23,007	46.0	2,891	51.3	20,116	45.2	3,288	28.7	845	29.7
Materials sciences	1,571	33.3	373	33.0	1,198	33.4	247	27.5	69	21.7
Physics	17,119	25.1	2,179	23.1	14,940	25.4	2,723	21.8	1,210	18.3
Physical sciences nec	975	47.9	457	51.4	518	44.8	237	31.2	371	22.4
Psychology	73,828	80.0	49,474	81.8	24,354	76.6	1,344	64.0	950	66.0
Applied psychology	25,198	81.4	20,430	82.4	4,768	77.3	105	76.2	118	66.1
Clinical psychology	7,873	80.3	4,603	80.3	3,270	80.3	59	81.4	20	70.0
Counseling psychology	16,071	82.4	13,161	83.0	2,910	79.8	9	77.8	8	87.5
Human development	2,080	88.9	1,321	91.4	759	84.6	130	71.5	158	72.2
Psychology, general	14,928	75.9	7,321	77.2	7,607	74.6	768	61.3	472	62.3
Research and experimental psychology	7,678	76.0	2,638	81.2	5,040	73.4	273	59.0	174	69.0
Social sciences	74,591	54.8	41,600	56.3	32,991	53.0	1,854	53.4	1,854	53.5
Agricultural and natural resource economics	740	47.0	436	47.0	304	47.0	72	37.5	51	37.3
Anthropology	5,796	68.2	1,971	71.1	3,825	66.8	152	60.5	70	60.0

TABLE 4-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2023

(Number and percent)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
Area, ethnic, cultural, gender, and group studies	4,920	66.4	2,582	67.2	2,338	65.5	273	63.7	143	59.4
Criminal justice and safety studies	6,424	61.7	4,942	63.7	1,482	55.3	19	47.4	22	63.6
Criminology	1,477	71.6	1,161	72.0	316	69.9	8	37.5	10	60.0
Economics (except agricultural and natural resource)	14,559	39.5	6,398	42.1	8,161	37.6	147	40.8	152	36.2
Geography and cartography	3,837	48.3	2,517	45.3	1,320	54.0	141	53.9	118	38.1
International relations and national security studies	7,473	48.1	7,147	48.3	326	45.1	119	42.0	139	38.1
Linguistics	2,727	62.4	1,117	68.2	1,610	58.3	51	49.0	59	54.2
Political science and government	7,684	46.3	2,649	46.7	5,035	46.1	173	49.7	93	53.8
Public policy analysis	7,370	57.7	4,645	60.5	2,725	52.9	305	59.0	475	61.7
Sociology and population studies	6,404	67.7	1,888	71.9	4,516	65.9	189	52.9	196	56.1
Urban studies and affairs	966	60.8	648	62.5	318	57.2	7	85.7	21	76.2
Social sciences, other	4,214	63.6	3,499	64.1	715	61.0	198	51.5	305	56.4
Engineering	175,559	28.2	100,567	26.9	74,992	29.9	9,051	28.0	4,575	24.3
Aerospace, aeronautical, and astronautical engineering	8,264	19.9	5,380	19.9	2,884	19.9	254	18.5	166	17.5
Biological, biomedical, and biosystems engineering	15,203	48.8	5,204	50.4	9,999	47.9	1,594	39.5	674	40.2
Chemical, petroleum, and chemical-related engineering	10,546	34.6	2,658	31.6	7,888	35.6	1,501	28.2	349	25.8
Chemical engineering	9,701	35.9	2,271	33.6	7,430	36.6	1,471	28.2	303	28.1
Petroleum engineering	845	19.6	387	20.4	458	19.0	30	26.7	46	10.9
Civil, environmental, transportation and related engineering fields	19,934	33.6	12,082	32.8	7,852	34.9	1,070	33.0	654	25.7
Civil engineering	15,851	31.3	9,149	30.3	6,702	32.7	960	33.3	571	25.7
Architectural, environmental, construction and surveying engineering	4,083	42.6	2,933	40.5	1,150	47.7	110	30.0	83	25.3
Electrical, electronics, communications and computer engineering	48,799	23.6	31,093	24.9	17,706	21.3	1,339	21.4	799	16.9
Electrical, electronics, and communications engineering	32,988	21.4	18,215	21.6	14,773	21.1	1,257	21.3	731	16.7
Computer engineering	15,811	28.0	12,878	29.4	2,933	21.9	82	23.2	68	19.1
Industrial, manufacturing, systems engineering and operations research	15,762	29.2	11,873	28.0	3,889	33.1	170	28.2	221	26.2
Industrial and manufacturing engineering	8,113	27.6	5,821	24.8	2,292	34.8	107	24.3	83	21.7
Systems engineering and operations research	7,649	31.0	6,052	31.1	1,597	30.6	63	34.9	138	29.0
Mechanical engineering	27,014	18.8	15,335	16.6	11,679	21.5	1,317	19.1	560	16.8
Metallurgical, mining, materials and related engineering fields	7,244	31.6	2,462	31.3	4,782	31.8	557	23.2	249	19.3
Other engineering	22,793	28.9	14,480	29.0	8,313	28.8	1,249	29.1	903	24.4
Agricultural engineering	1,032	39.0	377	44.0	655	36.0	154	35.1	53	32.1
Engineering mechanics, physics, and science	2,390	28.5	696	27.6	1,694	28.9	291	27.8	190	22.1
Nuclear engineering	1,606	21.5	516	18.4	1,090	23.0	103	18.4	35	22.9
Engineering, other	17,765	29.1	12,891	29.1	4,874	29.1	701	29.8	625	24.5

TABLE 4-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field and sex: 2023

(Number and percent)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent female	Total number	Percent female
	Total number	Percent female	Total number	Percent female	Total number	Percent female				
Health	81,047	77.0	61,779	79.4	19,268	69.3	18,817	50.9	9,167	54.6
Clinical medicine	34,658	76.1	28,484	77.0	6,174	71.9	16,393	50.6	7,798	54.2
Medical clinical sciences and clinical and medical laboratory sciences	2,117	65.2	1,242	64.5	875	66.3	521	48.4	477	53.5
Public health	32,541	76.8	27,242	77.6	5,299	72.8	848	63.1	911	68.3
Anesthesiology	ne	ne	ne	ne	ne	ne	366	47.5	129	40.3
Cardiology and cardiovascular disease	ne	ne	ne	ne	ne	ne	679	48.2	228	47.4
Endocrinology, diabetes, and metabolism	ne	ne	ne	ne	ne	ne	314	51.3	122	59.8
Gastroenterology	ne	ne	ne	ne	ne	ne	296	51.4	89	43.8
Hematology	ne	ne	ne	ne	ne	ne	354	48.6	168	49.4
Neurology and neurosurgery	ne	ne	ne	ne	ne	ne	1,715	49.4	533	50.7
Obstetrics and gynecology	ne	ne	ne	ne	ne	ne	274	61.7	121	69.4
Oncology and cancer research	ne	ne	ne	ne	ne	ne	1,512	51.5	587	60.6
Ophthalmology	ne	ne	ne	ne	ne	ne	537	50.1	295	47.8
Otorhinolaryngology	ne	ne	ne	ne	ne	ne	279	49.5	148	54.7
Pediatrics	ne	ne	ne	ne	ne	ne	1,134	58.1	743	57.3
Psychiatry	ne	ne	ne	ne	ne	ne	1,031	60.9	346	60.4
Pulmonary disease	ne	ne	ne	ne	ne	ne	258	47.7	118	56.8
Radiological sciences	ne	ne	ne	ne	ne	ne	1,359	41.6	465	36.8
Surgery	ne	ne	ne	ne	ne	ne	1,275	42.6	608	43.6
Clinical medicine nec	ne	ne	ne	ne	ne	ne	3,641	49.7	1,710	54.2
Other health	46,389	77.6	33,295	81.4	13,094	68.1	2,424	52.8	1,369	56.8
Communication disorders sciences	19,109	94.7	18,183	95.4	926	80.7	94	63.8	85	71.8
Dental sciences	2,231	56.3	1,420	53.5	811	61.3	310	48.7	159	50.9
Kinesiology and exercise science	5,254	50.8	4,286	51.2	968	49.2	83	50.6	50	56.0
Nursing science	5,510	83.8	1,701	87.1	3,809	82.4	154	85.7	187	83.4
Pharmaceutical sciences	5,219	61.4	2,265	67.2	2,954	56.9	1,295	48.8	469	42.6
Other health nec	9,066	67.9	5,440	69.5	3,626	65.5	488	53.7	419	59.9

ne = not eligible.

nec = not elsewhere classified.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-3

Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2023

(Number and percent)

Detailed field	All graduate students								Master's students								Doctoral students							
	Total		Full time				Part time		Total		Full time				Part time		Total		Full time				Part time	
			All full time		First time, full time						All full time		First time, full time						All full time		First time, full time			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All detailed fields	818,095	100.0	598,588	100.0	203,798	100.0	219,507	100.0	510,866	100.0	329,971	100.0	153,545	100.0	180,895	100.0	307,229	100.0	268,617	100.0	50,253	100.0	38,612	100.0
Science	561,489	68.6	411,971	68.8	139,799	68.6	149,518	68.1	348,520	68.2	222,976	67.6	104,385	68.0	125,544	69.4	212,969	69.3	188,995	70.4	35,414	70.5	23,974	62.1
Agricultural and veterinary sciences	11,755	1.4	8,319	1.4	2,240	1.1	3,436	1.6	6,901	1.4	4,186	1.3	1,612	1.0	2,715	1.5	4,854	1.6	4,133	1.5	628	1.2	721	1.9
Agricultural sciences	10,572	1.3	7,541	1.3	2,050	1.0	3,031	1.4	6,218	1.2	3,854	1.2	1,492	1.0	2,364	1.3	4,354	1.4	3,687	1.4	558	1.1	667	1.7
Veterinary biomedical and clinical sciences	1,183	0.1	778	0.1	190	0.1	405	0.2	683	0.1	332	0.1	120	0.1	351	0.2	500	0.2	446	0.2	70	0.1	54	0.1
Biological and biomedical sciences	105,566	12.9	86,153	14.4	25,552	12.5	19,413	8.8	44,703	8.8	29,180	8.8	15,106	9.8	15,523	8.6	60,863	19.8	56,973	21.2	10,446	20.8	3,890	10.1
Biochemistry	5,763	0.7	5,236	0.9	1,099	0.5	527	0.2	778	0.2	532	0.2	291	0.2	246	0.1	4,985	1.6	4,704	1.8	808	1.6	281	0.7
Biology	15,531	1.9	11,405	1.9	3,342	1.6	4,126	1.9	7,988	1.6	4,508	1.4	2,100	1.4	3,480	1.9	7,543	2.5	6,897	2.6	1,242	2.5	646	1.7
Biomedical sciences	11,806	1.4	9,587	1.6	4,109	2.0	2,219	1.0	6,391	1.3	4,435	1.3	2,699	1.8	1,956	1.1	5,415	1.8	5,152	1.9	1,410	2.8	263	0.7
Biophysics	952	0.1	940	0.2	173	0.1	12	*	9	*	8	*	4	*	1	*	943	0.3	932	0.3	169	0.3	11	*
Biostatistics and bioinformatics	8,283	1.0	6,884	1.2	2,232	1.1	1,399	0.6	4,240	0.8	3,171	1.0	1,562	1.0	1,069	0.6	4,043	1.3	3,713	1.4	670	1.3	330	0.9
Biotechnology	4,543	0.6	2,607	0.4	1,244	0.6	1,936	0.9	4,420	0.9	2,498	0.8	1,220	0.8	1,922	1.1	123	*	109	*	24	*	14	*
Botany and plant biology	1,677	0.2	1,565	0.3	306	0.2	112	0.1	378	0.1	330	0.1	108	0.1	48	*	1,299	0.4	1,235	0.5	198	0.4	64	0.2
Cell, cellular biology, and anatomical sciences	6,478	0.8	5,980	1.0	1,387	0.7	498	0.2	1,031	0.2	739	0.2	470	0.3	292	0.2	5,447	1.8	5,241	2.0	917	1.8	206	0.5
Ecology and population biology	3,833	0.5	3,192	0.5	712	0.3	641	0.3	1,035	0.2	713	0.2	297	0.2	322	0.2	2,798	0.9	2,479	0.9	415	0.8	319	0.8
Epidemiology	6,138	0.8	4,728	0.8	1,741	0.9	1,410	0.6	3,837	0.8	2,788	0.8	1,379	0.9	1,049	0.6	2,301	0.7	1,940	0.7	362	0.7	361	0.9
Genetics	3,187	0.4	2,929	0.5	592	0.3	258	0.1	693	0.1	507	0.2	252	0.2	186	0.1	2,494	0.8	2,422	0.9	340	0.7	72	0.2
Microbiological sciences and immunology	6,588	0.8	5,298	0.9	1,035	0.5	1,290	0.6	1,934	0.4	843	0.3	376	0.2	1,091	0.6	4,654	1.5	4,455	1.7	659	1.3	199	0.5
Molecular biology	1,668	0.2	1,481	0.2	351	0.2	187	0.1	388	0.1	269	0.1	143	0.1	119	0.1	1,280	0.4	1,212	0.5	208	0.4	68	0.2
Neurobiology and neuroscience	6,580	0.8	6,316	1.1	1,106	0.5	264	0.1	480	0.1	359	0.1	176	0.1	121	0.1	6,100	2.0	5,957	2.2	930	1.9	143	0.4
Nutrition science	4,068	0.5	3,020	0.5	1,213	0.6	1,048	0.5	2,959	0.6	2,063	0.6	1,033	0.7	896	0.5	1,109	0.4	957	0.4	180	0.4	152	0.4
Pathology and experimental pathology	1,106	0.1	1,048	0.2	178	0.1	58	*	143	*	120	*	56	*	23	*	963	0.3	928	0.3	122	0.2	35	0.1
Pharmacology and toxicology	3,304	0.4	2,861	0.5	616	0.3	443	0.2	844	0.2	508	0.2	267	0.2	336	0.2	2,460	0.8	2,353	0.9	349	0.7	107	0.3
Physiology	6,101	0.7	5,144	0.9	1,658	0.8	957	0.4	2,951	0.6	2,155	0.7	1,202	0.8	796	0.4	3,150	1.0	2,989	1.1	456	0.9	161	0.4
Zoology and animal biology	2,042	0.2	1,577	0.3	365	0.2	465	0.2	901	0.2	563	0.2	213	0.1	338	0.2	1,141	0.4	1,014	0.4	152	0.3	127	0.3
Biological and biomedical sciences nec	5,918	0.7	4,355	0.7	2,093	1.0	1,563	0.7	3,303	0.6	2,071	0.6	1,258	0.8	1,232	0.7	2,615	0.9	2,284	0.9	835	1.7	331	0.9
Computer and information sciences	166,014	20.3	113,633	19.0	47,543	23.3	52,381	23.9	143,530	28.1	94,517	28.6	43,890	28.6	49,013	27.1	22,484	7.3	19,116	7.1	3,653	7.3	3,368	8.7
Artificial intelligence, informatics, and computer and information science topics	7,375	0.9	5,168	0.9	2,289	1.1	2,207	1.0	6,433	1.3	4,365	1.3	2,067	1.3	2,068	1.1	942	0.3	803	0.3	222	0.4	139	0.4
Computer and information sciences	49,206	6.0	30,624	5.1	13,151	6.5	18,582	8.5	41,959	8.2	24,466	7.4	11,984	7.8	17,493	9.7	7,247	2.4	6,158	2.3	1,167	2.3	1,089	2.8
Computer and information systems security	11,498	1.4	5,012	0.8	2,232	1.1	6,486	3.0	10,774	2.1	4,600	1.4	2,090	1.4	6,174	3.4	724	0.2	412	0.2	142	0.3	312	0.8
Computer science	57,819	7.1	45,864	7.7	17,985	8.8	11,955	5.4	46,477	9.1	35,859	10.9	16,172	10.5	10,618	5.9	11,342	3.7	10,005	3.7	1,813	3.6	1,337	3.5
Information science and studies	17,660	2.2	10,988	1.8	4,570	2.2	6,672	3.0	16,138	3.2	9,841	3.0	4,376	2.8	6,297	3.5	1,522	0.5	1,147	0.4	194	0.4	375	1.0
Information technology	15,074	1.8	10,679	1.8	4,968	2.4	4,395	2.0	14,484	2.8	10,172	3.1	4,868	3.2	4,312	2.4	590	0.2	507	0.2	100	0.2	83	0.2

TABLE 4-3

Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2023

(Number and percent)

Detailed field	All graduate students								Master's students								Doctoral students							
	Total		Full time				Part time		Total		Full time				Part time		Total		Full time				Part time	
			All full time		First time, full time						All full time		First time, full time						All full time		First time, full time			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Computer and information sciences nec	7,382	0.9	5,298	0.9	2,348	1.2	2,084	0.9	7,265	1.4	5,214	1.6	2,333	1.5	2,051	1.1	117	*	84	*	15	*	33	0.1
Geosciences, atmospheric, and ocean sciences	11,594	1.4	9,519	1.6	2,483	1.2	2,075	0.9	4,793	0.9	3,376	1.0	1,443	0.9	1,417	0.8	6,801	2.2	6,143	2.3	1,040	2.1	658	1.7
Atmospheric sciences and meteorology	1,431	0.2	1,284	0.2	327	0.2	147	0.1	441	0.1	384	0.1	180	0.1	57	*	990	0.3	900	0.3	147	0.3	90	0.2
Geological and earth sciences	7,240	0.9	5,870	1.0	1,537	0.8	1,370	0.6	2,984	0.6	2,021	0.6	861	0.6	963	0.5	4,256	1.4	3,849	1.4	676	1.3	407	1.1
Ocean and marine sciences	2,923	0.4	2,365	0.4	619	0.3	558	0.3	1,368	0.3	971	0.3	402	0.3	397	0.2	1,555	0.5	1,394	0.5	217	0.4	161	0.4
Geosciences, atmospheric, and ocean sciences nec	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne
Mathematics and statistics	33,893	4.1	26,832	4.5	9,842	4.8	7,061	3.2	20,105	3.9	14,237	4.3	7,311	4.8	5,868	3.2	13,788	4.5	12,595	4.7	2,531	5.0	1,193	3.1
Applied mathematics	11,140	1.4	9,042	1.5	4,320	2.1	2,098	1.0	8,977	1.8	7,101	2.2	3,910	2.5	1,876	1.0	2,163	0.7	1,941	0.7	410	0.8	222	0.6
Mathematics	11,801	1.4	9,519	1.6	2,410	1.2	2,282	1.0	3,623	0.7	1,969	0.6	897	0.6	1,654	0.9	8,178	2.7	7,550	2.8	1,513	3.0	628	1.6
Statistics	10,952	1.3	8,271	1.4	3,112	1.5	2,681	1.2	7,505	1.5	5,167	1.6	2,504	1.6	2,338	1.3	3,447	1.1	3,104	1.2	608	1.2	343	0.9
Multidisciplinary and interdisciplinary sciences	26,429	3.2	17,187	2.9	7,733	3.8	9,242	4.2	21,928	4.3	13,413	4.1	6,928	4.5	8,515	4.7	4,501	1.5	3,774	1.4	805	1.6	727	1.9
Biological and physical sciences	1,896	0.2	1,559	0.3	635	0.3	337	0.2	921	0.2	657	0.2	386	0.3	264	0.1	975	0.3	902	0.3	249	0.5	73	0.2
Computational science	3,228	0.4	2,001	0.3	960	0.5	1,227	0.6	2,939	0.6	1,784	0.5	911	0.6	1,155	0.6	289	0.1	217	0.1	49	0.1	72	0.2
Data science and data analytics	10,416	1.3	5,749	1.0	3,139	1.5	4,667	2.1	10,243	2.0	5,613	1.7	3,097	2.0	4,630	2.6	173	0.1	136	0.1	42	0.1	37	0.1
International and global studies	996	0.1	750	0.1	314	0.2	246	0.1	865	0.2	648	0.2	300	0.2	217	0.1	131	*	102	*	14	*	29	0.1
Multidisciplinary and interdisciplinary sciences nec	9,893	1.2	7,128	1.2	2,685	1.3	2,765	1.3	6,960	1.4	4,711	1.4	2,234	1.5	2,249	1.2	2,933	1.0	2,417	0.9	451	0.9	516	1.3
Natural resources and conservation	13,490	1.6	9,028	1.5	2,964	1.5	4,462	2.0	9,486	1.9	5,764	1.7	2,436	1.6	3,722	2.1	4,004	1.3	3,264	1.2	528	1.1	740	1.9
Environmental science and studies	6,348	0.8	4,483	0.7	1,606	0.8	1,865	0.8	4,359	0.9	2,824	0.9	1,332	0.9	1,535	0.8	1,989	0.6	1,659	0.6	274	0.5	330	0.9
Forestry, natural resources, and conservation	7,142	0.9	4,545	0.8	1,358	0.7	2,597	1.2	5,127	1.0	2,940	0.9	1,104	0.7	2,187	1.2	2,015	0.7	1,605	0.6	254	0.5	410	1.1
Physical sciences	44,329	5.4	39,475	6.6	8,858	4.3	4,854	2.2	6,000	1.2	3,471	1.1	1,591	1.0	2,529	1.4	38,329	12.5	36,004	13.4	7,267	14.5	2,325	6.0
Astronomy and astrophysics	1,657	0.2	1,535	0.3	314	0.2	122	0.1	100	*	50	*	25	*	50	*	1,557	0.5	1,485	0.6	289	0.6	72	0.2
Chemistry	23,007	2.8	20,741	3.5	4,895	2.4	2,266	1.0	2,891	0.6	1,703	0.5	777	0.5	1,188	0.7	20,116	6.5	19,038	7.1	4,118	8.2	1,078	2.8
Materials sciences	1,571	0.2	1,395	0.2	356	0.2	176	0.1	373	0.1	280	0.1	159	0.1	93	0.1	1,198	0.4	1,115	0.4	197	0.4	83	0.2
Physics	17,119	2.1	15,190	2.5	3,118	1.5	1,929	0.9	2,179	0.4	1,216	0.4	537	0.3	963	0.5	14,940	4.9	13,974	5.2	2,581	5.1	966	2.5
Physical sciences nec	975	0.1	614	0.1	175	0.1	361	0.2	457	0.1	222	0.1	93	0.1	235	0.1	518	0.2	392	0.1	82	0.2	126	0.3
Psychology	73,828	9.0	47,479	7.9	14,913	7.3	26,349	12.0	49,474	9.7	28,571	8.7	11,234	7.3	20,903	11.6	24,354	7.9	18,908	7.0	3,679	7.3	5,446	14.1
Applied psychology	25,198	3.1	13,646	2.3	4,914	2.4	11,552	5.3	20,430	4.0	10,318	3.1	4,226	2.8	10,112	5.6	4,768	1.6	3,328	1.2	688	1.4	1,440	3.7
Clinical psychology	7,873	1.0	5,233	0.9	1,305	0.6	2,640	1.2	4,603	0.9	2,577	0.8	763	0.5	2,026	1.1	3,270	1.1	2,656	1.0	542	1.1	614	1.6
Counseling psychology	16,071	2.0	10,264	1.7	3,155	1.5	5,807	2.6	13,161	2.6	8,485	2.6	2,809	1.8	4,676	2.6	2,910	0.9	1,779	0.7	346	0.7	1,131	2.9
Human development	2,080	0.3	1,415	0.2	522	0.3	665	0.3	1,321	0.3	830	0.3	406	0.3	491	0.3	759	0.2	585	0.2	116	0.2	174	0.5
Psychology, general	14,928	1.8	10,235	1.7	3,209	1.6	4,693	2.1	7,321	1.4	4,393	1.3	2,129	1.4	2,928	1.6	7,607	2.5	5,842	2.2	1,080	2.1	1,765	4.6
Research and experimental psychology	7,678	0.9	6,686	1.1	1,808	0.9	992	0.5	2,638	0.5	1,968	0.6	901	0.6	670	0.4	5,040	1.6	4,718	1.8	907	1.8	322	0.8
Social sciences	74,591	9.1	54,346	9.1	17,671	8.7	20,245	9.2	41,600	8.1	26,261	8.0	12,834	8.4	15,339	8.5	32,991	10.7	28,085	10.5	4,837	9.6	4,906	12.7

TABLE 4-3

Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2023

(Number and percent)

Detailed field	All graduate students								Master's students								Doctoral students							
	Total		Full time				Part time		Total		Full time				Part time		Total		Full time				Part time	
			All full time		First time, full time						All full time		First time, full time						All full time		First time, full time			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Agricultural and natural resource economics	740	0.1	592	0.1	190	0.1	148	0.1	436	0.1	326	0.1	142	0.1	110	0.1	304	0.1	266	0.1	48	0.1	38	0.1
Anthropology	5,796	0.7	4,568	0.8	1,032	0.5	1,228	0.6	1,971	0.4	1,243	0.4	573	0.4	728	0.4	3,825	1.2	3,325	1.2	459	0.9	500	1.3
Area, ethnic, cultural, gender, and group studies	4,920	0.6	3,709	0.6	1,220	0.6	1,211	0.6	2,582	0.5	1,834	0.6	901	0.6	748	0.4	2,338	0.8	1,875	0.7	319	0.6	463	1.2
Criminal justice and safety studies	6,424	0.8	3,208	0.5	1,175	0.6	3,216	1.5	4,942	1.0	2,263	0.7	977	0.6	2,679	1.5	1,482	0.5	945	0.4	198	0.4	537	1.4
Criminology	1,477	0.2	845	0.1	344	0.2	632	0.3	1,161	0.2	585	0.2	301	0.2	576	0.3	316	0.1	260	0.1	43	0.1	56	0.1
Economics (except agricultural and natural resource)	14,559	1.8	12,558	2.1	3,958	1.9	2,001	0.9	6,398	1.3	4,957	1.5	2,554	1.7	1,441	0.8	8,161	2.7	7,601	2.8	1,404	2.8	560	1.5
Geography and cartography	3,837	0.5	2,293	0.4	733	0.4	1,544	0.7	2,517	0.5	1,184	0.4	543	0.4	1,333	0.7	1,320	0.4	1,109	0.4	190	0.4	211	0.5
International relations and national security studies	7,473	0.9	4,654	0.8	2,051	1.0	2,819	1.3	7,147	1.4	4,404	1.3	2,003	1.3	2,743	1.5	326	0.1	250	0.1	48	0.1	76	0.2
Linguistics	2,727	0.3	2,111	0.4	528	0.3	616	0.3	1,117	0.2	667	0.2	286	0.2	450	0.2	1,610	0.5	1,444	0.5	242	0.5	166	0.4
Political science and government	7,684	0.9	5,973	1.0	1,513	0.7	1,711	0.8	2,649	0.5	1,463	0.4	721	0.5	1,186	0.7	5,035	1.6	4,510	1.7	792	1.6	525	1.4
Public policy analysis	7,370	0.9	4,842	0.8	1,883	0.9	2,528	1.2	4,645	0.9	3,101	0.9	1,555	1.0	1,544	0.9	2,725	0.9	1,741	0.6	328	0.7	984	2.5
Sociology and population studies	6,404	0.8	5,041	0.8	1,232	0.6	1,363	0.6	1,888	0.4	1,129	0.3	587	0.4	759	0.4	4,516	1.5	3,912	1.5	645	1.3	604	1.6
Urban studies and affairs	966	0.1	503	0.1	159	0.1	463	0.2	648	0.1	301	0.1	134	0.1	347	0.2	318	0.1	202	0.1	25	*	116	0.3
Social sciences, other	4,214	0.5	3,449	0.6	1,653	0.8	765	0.3	3,499	0.7	2,804	0.8	1,557	1.0	695	0.4	715	0.2	645	0.2	96	0.2	70	0.2
Engineering	175,559	21.5	131,607	22.0	42,684	20.9	43,952	20.0	100,567	19.7	65,160	19.7	30,781	20.0	35,407	19.6	74,992	24.4	66,447	24.7	11,903	23.7	8,545	22.1
Aerospace, aeronautical, and astronautical engineering	8,264	1.0	5,447	0.9	1,680	0.8	2,817	1.3	5,380	1.1	2,883	0.9	1,262	0.8	2,497	1.4	2,884	0.9	2,564	1.0	418	0.8	320	0.8
Biological, biomedical, and biosystems engineering	15,203	1.9	13,267	2.2	4,143	2.0	1,936	0.9	5,204	1.0	3,961	1.2	2,345	1.5	1,243	0.7	9,999	3.3	9,306	3.5	1,798	3.6	693	1.8
Chemical, petroleum, and chemical-related engineering	10,546	1.3	9,328	1.6	2,451	1.2	1,218	0.6	2,658	0.5	1,827	0.6	921	0.6	831	0.5	7,888	2.6	7,501	2.8	1,530	3.0	387	1.0
Chemical engineering	9,701	1.2	8,644	1.4	2,252	1.1	1,057	0.5	2,271	0.4	1,549	0.5	799	0.5	722	0.4	7,430	2.4	7,095	2.6	1,453	2.9	335	0.9
Petroleum engineering	845	0.1	684	0.1	199	0.1	161	0.1	387	0.1	278	0.1	122	0.1	109	0.1	458	0.1	406	0.2	77	0.2	52	0.1
Civil, environmental, transportation and related engineering fields	19,934	2.4	14,930	2.5	4,935	2.4	5,004	2.3	12,082	2.4	7,984	2.4	3,738	2.4	4,098	2.3	7,852	2.6	6,946	2.6	1,197	2.4	906	2.3
Civil engineering	15,851	1.9	12,011	2.0	3,906	1.9	3,840	1.7	9,149	1.8	6,085	1.8	2,908	1.9	3,064	1.7	6,702	2.2	5,926	2.2	998	2.0	776	2.0
Architectural, environmental, construction and surveying engineering	4,083	0.5	2,919	0.5	1,029	0.5	1,164	0.5	2,933	0.6	1,899	0.6	830	0.5	1,034	0.6	1,150	0.4	1,020	0.4	199	0.4	130	0.3
Electrical, electronics, communications and computer engineering	48,799	6.0	37,357	6.2	12,529	6.1	11,442	5.2	31,093	6.1	21,886	6.6	9,920	6.5	9,207	5.1	17,706	5.8	15,471	5.8	2,609	5.2	2,235	5.8
Electrical, electronics, and communications engineering	32,988	4.0	24,699	4.1	7,728	3.8	8,289	3.8	18,215	3.6	11,750	3.6	5,564	3.6	6,465	3.6	14,773	4.8	12,949	4.8	2,164	4.3	1,824	4.7
Computer engineering	15,811	1.9	12,658	2.1	4,801	2.4	3,153	1.4	12,878	2.5	10,136	3.1	4,356	2.8	2,742	1.5	2,933	1.0	2,522	0.9	445	0.9	411	1.1
Industrial, manufacturing, systems engineering and operations research	15,762	1.9	9,291	1.6	3,693	1.8	6,471	2.9	11,873	2.3	6,287	1.9	3,128	2.0	5,586	3.1	3,889	1.3	3,004	1.1	565	1.1	885	2.3
Industrial and manufacturing engineering	8,113	1.0	5,622	0.9	1,955	1.0	2,491	1.1	5,821	1.1	3,765	1.1	1,632	1.1	2,056	1.1	2,292	0.7	1,857	0.7	323	0.6	435	1.1
Systems engineering and operations research	7,649	0.9	3,669	0.6	1,738	0.9	3,980	1.8	6,052	1.2	2,522	0.8	1,496	1.0	3,530	2.0	1,597	0.5	1,147	0.4	242	0.5	450	1.2
Mechanical engineering	27,014	3.3	20,323	3.4	6,294	3.1	6,691	3.0	15,335	3.0	9,861	3.0	4,549	3.0	5,474	3.0	11,679	3.8	10,462	3.9	1,745	3.5	1,217	3.2
Metallurgical, mining, materials and related engineering fields	7,244	0.9	5,990	1.0	1,615	0.8	1,254	0.6	2,462	0.5	1,619	0.5	783	0.5	843	0.5	4,782	1.6	4,371	1.6	832	1.7	411	1.1
Other engineering	22,793	2.8	15,674	2.6	5,344	2.6	7,119	3.2	14,480	2.8	8,852	2.7	4,135	2.7	5,628	3.1	8,313	2.7	6,822	2.5	1,209	2.4	1,491	3.9
Agricultural engineering	1,032	0.1	863	0.1	201	0.1	169	0.1	377	0.1	288	0.1	113	0.1	89	*	655	0.2	575	0.2	88	0.2	80	0.2

TABLE 4-3

Master's and doctoral students within science, engineering, and health fields, by enrollment intensity: 2023

(Number and percent)

Detailed field	All graduate students								Master's students						Doctoral students									
	Total		Full time				Part time		Total		Full time				Part time		Total		Full time				Part time	
			All full time		First time, full time						All full time		First time, full time						All full time		First time, full time			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Engineering mechanics, physics, and science	2,390	0.3	2,070	0.3	508	0.2	320	0.1	696	0.1	492	0.1	263	0.2	204	0.1	1,694	0.6	1,578	0.6	245	0.5	116	0.3
Nuclear engineering	1,606	0.2	1,251	0.2	308	0.2	355	0.2	516	0.1	330	0.1	149	0.1	186	0.1	1,090	0.4	921	0.3	159	0.3	169	0.4
Engineering, other	17,765	2.2	11,490	1.9	4,327	2.1	6,275	2.9	12,891	2.5	7,742	2.3	3,610	2.4	5,149	2.8	4,874	1.6	3,748	1.4	717	1.4	1,126	2.9
Health	81,047	9.9	55,010	9.2	21,315	10.5	26,037	11.9	61,779	12.1	41,835	12.7	18,379	12.0	19,944	11.0	19,268	6.3	13,175	4.9	2,936	5.8	6,093	15.8
Clinical medicine	34,658	4.2	20,426	3.4	8,217	4.0	14,232	6.5	28,484	5.6	16,700	5.1	7,345	4.8	11,784	6.5	6,174	2.0	3,726	1.4	872	1.7	2,448	6.3
Medical clinical sciences and clinical and medical laboratory sciences	2,117	0.3	1,165	0.2	454	0.2	952	0.4	1,242	0.2	730	0.2	330	0.2	512	0.3	875	0.3	435	0.2	124	0.2	440	1.1
Public health	32,541	4.0	19,261	3.2	7,763	3.8	13,280	6.0	27,242	5.3	15,970	4.8	7,015	4.6	11,272	6.2	5,299	1.7	3,291	1.2	748	1.5	2,008	5.2
Other health	46,389	5.7	34,584	5.8	13,098	6.4	11,805	5.4	33,295	6.5	25,135	7.6	11,034	7.2	8,160	4.5	13,094	4.3	9,449	3.5	2,064	4.1	3,645	9.4
Communication disorders sciences	19,109	2.3	16,692	2.8	6,951	3.4	2,417	1.1	18,183	3.6	15,900	4.8	6,785	4.4	2,283	1.3	926	0.3	792	0.3	166	0.3	134	0.3
Dental sciences	2,231	0.3	2,101	0.4	678	0.3	130	0.1	1,420	0.3	1,300	0.4	468	0.3	120	0.1	811	0.3	801	0.3	210	0.4	10	*
Kinesiology and exercise science	5,254	0.6	3,657	0.6	1,645	0.8	1,597	0.7	4,286	0.8	2,908	0.9	1,492	1.0	1,378	0.8	968	0.3	749	0.3	153	0.3	219	0.6
Nursing science	5,510	0.7	2,919	0.5	770	0.4	2,591	1.2	1,701	0.3	737	0.2	225	0.1	964	0.5	3,809	1.2	2,182	0.8	545	1.1	1,627	4.2
Pharmaceutical sciences	5,219	0.6	3,872	0.6	1,105	0.5	1,347	0.6	2,265	0.4	1,214	0.4	587	0.4	1,051	0.6	2,954	1.0	2,658	1.0	518	1.0	296	0.8
Other health nec	9,066	1.1	5,343	0.9	1,949	1.0	3,723	1.7	5,440	1.1	3,076	0.9	1,477	1.0	2,364	1.3	3,626	1.2	2,267	0.8	472	0.9	1,359	3.5

* = value < 0.05%; ne = not eligible.

nec = not elsewhere classified.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-4a
Citizenship, ethnicity, and race of graduate students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																	Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino													Unknown ethnicity and race			
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race						
					Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number				
All detailed fields	818,095	100.0	70,428	100.0	1,984	100.0	62,549	100.0	46,276	100.0	754	100.0	269,477	100.0	20,004	100.0	24,336	100.0	322,287	100.0	
Science	561,489	68.6	49,494	70.3	1,412	71.2	41,873	66.9	32,482	70.2	572	75.9	185,527	68.8	13,966	69.8	16,700	68.6	219,463	68.1	
Agricultural and veterinary sciences	11,755	1.4	896	1.3	41	2.1	372	0.6	422	0.9	17	2.3	5,457	2.0	244	1.2	235	1.0	4,071	1.3	
Agricultural sciences	10,572	1.3	800	1.1	41	2.1	321	0.5	379	0.8	16	2.1	4,902	1.8	223	1.1	190	0.8	3,700	1.1	
Veterinary biomedical and clinical sciences	1,183	0.1	96	0.1	0	0.0	51	0.1	43	0.1	1	0.1	555	0.2	21	0.1	45	0.2	371	0.1	
Biological and biomedical sciences	105,566	12.9	11,037	15.7	284	14.3	10,603	17.0	6,510	14.1	112	14.9	44,088	16.4	3,444	17.2	3,242	13.3	26,246	8.1	
Biochemistry	5,763	0.7	600	0.9	24	1.2	504	0.8	227	0.5	5	0.7	2,377	0.9	184	0.9	137	0.6	1,705	0.5	
Biology	15,531	1.9	1,792	2.5	35	1.8	1,033	1.7	839	1.8	21	2.8	7,621	2.8	534	2.7	376	1.5	3,280	1.0	
Biomedical sciences	11,806	1.4	1,333	1.9	42	2.1	1,628	2.6	1,277	2.8	7	0.9	4,202	1.6	377	1.9	345	1.4	2,595	0.8	
Biophysics	952	0.1	85	0.1	1	0.1	112	0.2	23	*	0	0.0	351	0.1	40	0.2	37	0.2	303	0.1	
Biostatistics and bioinformatics	8,283	1.0	445	0.6	4	0.2	1,158	1.9	234	0.5	8	1.1	2,190	0.8	191	1.0	258	1.1	3,795	1.2	
Biotechnology	4,543	0.6	445	0.6	15	0.8	604	1.0	372	0.8	5	0.7	1,262	0.5	125	0.6	239	1.0	1,476	0.5	
Botany and plant biology	1,677	0.2	138	0.2	4	0.2	74	0.1	43	0.1	1	0.1	770	0.3	57	0.3	45	0.2	545	0.2	
Cell, cellular biology, and anatomical sciences	6,478	0.8	801	1.1	21	1.1	675	1.1	294	0.6	11	1.5	2,655	1.0	196	1.0	224	0.9	1,601	0.5	
Ecology and population biology	3,833	0.5	348	0.5	15	0.8	184	0.3	123	0.3	5	0.7	2,264	0.8	142	0.7	76	0.3	676	0.2	
Epidemiology	6,138	0.8	565	0.8	18	0.9	803	1.3	538	1.2	7	0.9	2,110	0.8	195	1.0	187	0.8	1,715	0.5	
Genetics	3,187	0.4	323	0.5	10	0.5	325	0.5	150	0.3	1	0.1	1,509	0.6	114	0.6	80	0.3	675	0.2	
Microbiological sciences and immunology	6,588	0.8	831	1.2	20	1.0	613	1.0	352	0.8	3	0.4	3,134	1.2	226	1.1	226	0.9	1,183	0.4	
Molecular biology	1,668	0.2	211	0.3	2	0.1	195	0.3	91	0.2	2	0.3	656	0.2	65	0.3	35	0.1	411	0.1	
Neurobiology and neuroscience	6,580	0.8	817	1.2	13	0.7	721	1.2	337	0.7	5	0.7	2,935	1.1	256	1.3	190	0.8	1,306	0.4	
Nutrition science	4,068	0.5	452	0.6	7	0.4	301	0.5	198	0.4	7	0.9	2,059	0.8	118	0.6	168	0.7	758	0.2	
Pathology and experimental pathology	1,106	0.1	140	0.2	3	0.2	89	0.1	55	0.1	3	0.4	469	0.2	31	0.2	64	0.3	252	0.1	
Pharmacology and toxicology	3,304	0.4	328	0.5	13	0.7	328	0.5	204	0.4	1	0.1	1,313	0.5	100	0.5	117	0.5	900	0.3	
Physiology	6,101	0.7	548	0.8	13	0.7	606	1.0	388	0.8	10	1.3	2,671	1.0	198	1.0	198	0.8	1,469	0.5	
Zoology and animal biology	2,042	0.2	167	0.2	5	0.3	71	0.1	50	0.1	0	0.0	1,203	0.4	95	0.5	41	0.2	410	0.1	
Biological and biomedical sciences nec	5,918	0.7	668	0.9	19	1.0	579	0.9	715	1.5	10	1.3	2,337	0.9	200	1.0	199	0.8	1,191	0.4	
Computer and information sciences	166,014	20.3	6,059	8.6	168	8.5	14,432	23.1	6,351	13.7	87	11.5	24,437	9.1	2,166	10.8	3,959	16.3	108,355	33.6	
Artificial intelligence, informatics, and computer and information science topics	7,375	0.9	286	0.4	10	0.5	710	1.1	277	0.6	5	0.7	1,321	0.5	132	0.7	144	0.6	4,490	1.4	
Computer and information sciences	49,206	6.0	1,641	2.3	32	1.6	5,006	8.0	1,147	2.5	21	2.8	7,713	2.9	647	3.2	896	3.7	32,103	10.0	
Computer and information systems security	11,498	1.4	1,074	1.5	42	2.1	1,142	1.8	1,853	4.0	20	2.7	3,277	1.2	315	1.6	536	2.2	3,239	1.0	
Computer science	57,819	7.1	1,258	1.8	24	1.2	4,557	7.3	816	1.8	17	2.3	5,992	2.2	571	2.9	1,273	5.2	43,311	13.4	

TABLE 4-4a
Citizenship, ethnicity, and race of graduate students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																	Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race				
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race						
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Information science and studies	17,660	2.2	886	1.3	21	1.1	1,547	2.5	1,429	3.1	18	2.4	3,511	1.3	274	1.4	802	3.3	9,172	2.8	
Information technology	15,074	1.8	530	0.8	32	1.6	973	1.6	541	1.2	6	0.8	1,371	0.5	131	0.7	172	0.7	11,318	3.5	
Computer and information sciences nec	7,382	0.9	384	0.5	7	0.4	497	0.8	288	0.6	0	0.0	1,252	0.5	96	0.5	136	0.6	4,722	1.5	
Geosciences, atmospheric sciences, and ocean sciences	11,594	1.4	1,132	1.6	29	1.5	415	0.7	311	0.7	5	0.7	6,201	2.3	454	2.3	304	1.2	2,743	0.9	
Atmospheric sciences and meteorology	1,431	0.2	98	0.1	0	0.0	50	0.1	52	0.1	1	0.1	768	0.3	50	0.2	29	0.1	383	0.1	
Geological and earth sciences	7,240	0.9	715	1.0	22	1.1	263	0.4	178	0.4	1	0.1	3,731	1.4	250	1.2	167	0.7	1,913	0.6	
Ocean and marine sciences	2,923	0.4	319	0.5	7	0.4	102	0.2	81	0.2	3	0.4	1,702	0.6	154	0.8	108	0.4	447	0.1	
Geosciences, atmospheric sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	
Mathematics and statistics	33,893	4.1	1,958	2.8	38	1.9	2,563	4.1	768	1.7	15	2.0	9,075	3.4	595	3.0	819	3.4	18,062	5.6	
Applied mathematics	11,140	1.4	552	0.8	10	0.5	713	1.1	220	0.5	6	0.8	2,169	0.8	166	0.8	249	1.0	7,055	2.2	
Mathematics	11,801	1.4	875	1.2	18	0.9	842	1.3	288	0.6	5	0.7	4,605	1.7	260	1.3	332	1.4	4,576	1.4	
Statistics	10,952	1.3	531	0.8	10	0.5	1,008	1.6	260	0.6	4	0.5	2,301	0.9	169	0.8	238	1.0	6,431	2.0	
Multidisciplinary and interdisciplinary sciences	26,429	3.2	1,935	2.7	43	2.2	2,392	3.8	1,458	3.2	25	3.3	7,814	2.9	574	2.9	731	3.0	11,457	3.6	
Biological and physical sciences	1,896	0.2	154	0.2	4	0.2	227	0.4	96	0.2	6	0.8	748	0.3	69	0.3	56	0.2	536	0.2	
Computational science	3,228	0.4	195	0.3	4	0.2	259	0.4	77	0.2	4	0.5	935	0.3	56	0.3	53	0.2	1,645	0.5	
Data science and data analytics	10,416	1.3	613	0.9	11	0.6	1,068	1.7	509	1.1	3	0.4	2,412	0.9	161	0.8	348	1.4	5,291	1.6	
International and global studies	996	0.1	191	0.3	7	0.4	91	0.1	82	0.2	5	0.7	308	0.1	37	0.2	25	0.1	250	0.1	
Multidisciplinary and interdisciplinary sciences nec	9,893	1.2	782	1.1	17	0.9	747	1.2	694	1.5	7	0.9	3,411	1.3	251	1.3	249	1.0	3,735	1.2	
Natural resources and conservation	13,490	1.6	1,240	1.8	120	6.0	448	0.7	464	1.0	26	3.4	8,051	3.0	449	2.2	341	1.4	2,351	0.7	
Environmental science and studies	6,348	0.8	682	1.0	60	3.0	284	0.5	255	0.6	21	2.8	3,548	1.3	197	1.0	172	0.7	1,129	0.4	
Forestry, natural resources, and conservation	7,142	0.9	558	0.8	60	3.0	164	0.3	209	0.5	5	0.7	4,503	1.7	252	1.3	169	0.7	1,222	0.4	
Physical sciences	44,329	5.4	3,263	4.6	46	2.3	2,821	4.5	1,133	2.4	19	2.5	16,702	6.2	1,124	5.6	974	4.0	18,247	5.7	
Astronomy and astrophysics	1,657	0.2	169	0.2	6	0.3	121	0.2	52	0.1	3	0.4	791	0.3	79	0.4	49	0.2	387	0.1	
Chemistry	23,007	2.8	1,837	2.6	19	1.0	1,544	2.5	661	1.4	14	1.9	8,390	3.1	558	2.8	485	2.0	9,499	2.9	
Materials sciences	1,571	0.2	73	0.1	1	0.1	137	0.2	41	0.1	1	0.1	452	0.2	32	0.2	39	0.2	795	0.2	
Physics	17,119	2.1	1,137	1.6	20	1.0	981	1.6	306	0.7	1	0.1	6,609	2.5	434	2.2	385	1.6	7,246	2.2	
Physical sciences nec	975	0.1	47	0.1	0	0.0	38	0.1	73	0.2	0	0.0	460	0.2	21	0.1	16	0.1	320	0.1	
Psychology	73,828	9.0	13,803	19.6	303	15.3	4,066	6.5	8,765	18.9	153	20.3	34,623	12.8	2,696	13.5	3,579	14.7	5,840	1.8	
Applied psychology	25,198	3.1	5,381	7.6	98	4.9	1,286	2.1	2,641	5.7	59	7.8	12,330	4.6	787	3.9	1,245	5.1	1,371	0.4	
Clinical psychology	7,873	1.0	1,755	2.5	23	1.2	575	0.9	560	1.2	18	2.4	3,859	1.4	362	1.8	371	1.5	350	0.1	
Counseling psychology	16,071	2.0	3,199	4.5	87	4.4	735	1.2	2,904	6.3	33	4.4	7,142	2.7	536	2.7	959	3.9	476	0.1	

TABLE 4-4a
Citizenship, ethnicity, and race of graduate students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																	Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race				
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race						
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Human development	2,080	0.3	266	0.4	13	0.7	94	0.2	205	0.4	1	0.1	1,073	0.4	98	0.5	72	0.3	258	0.1	
Psychology, general	14,928	1.8	2,242	3.2	64	3.2	740	1.2	1,927	4.2	39	5.2	6,821	2.5	636	3.2	772	3.2	1,687	0.5	
Research and experimental psychology	7,678	0.9	960	1.4	18	0.9	636	1.0	528	1.1	3	0.4	3,398	1.3	277	1.4	160	0.7	1,698	0.5	
Social sciences	74,591	9.1	8,171	11.6	340	17.1	3,761	6.0	6,300	13.6	113	15.0	29,079	10.8	2,220	11.1	2,516	10.3	22,091	6.9	
Agricultural and natural resource economics	740	0.1	48	0.1	2	0.1	16	*	27	0.1	0	0.0	247	0.1	13	0.1	10	*	377	0.1	
Anthropology	5,796	0.7	713	1.0	57	2.9	202	0.3	247	0.5	8	1.1	3,034	1.1	241	1.2	186	0.8	1,108	0.3	
Area, ethnic, cultural, gender, and group studies	4,920	0.6	893	1.3	113	5.7	270	0.4	582	1.3	29	3.8	1,516	0.6	225	1.1	148	0.6	1,144	0.4	
Criminal justice and safety studies	6,424	0.8	1,097	1.6	24	1.2	151	0.2	1,333	2.9	15	2.0	2,952	1.1	228	1.1	434	1.8	190	0.1	
Criminology	1,477	0.2	296	0.4	8	0.4	48	0.1	168	0.4	1	0.1	714	0.3	56	0.3	30	0.1	156	*	
Economics (except agricultural and natural resource)	14,559	1.8	584	0.8	9	0.5	755	1.2	314	0.7	7	0.9	3,205	1.2	192	1.0	265	1.1	9,228	2.9	
Geography and cartography	3,837	0.5	332	0.5	17	0.9	141	0.2	140	0.3	3	0.4	1,987	0.7	113	0.6	149	0.6	955	0.3	
International relations and national security studies	7,473	0.9	990	1.4	12	0.6	450	0.7	577	1.2	16	2.1	3,591	1.3	246	1.2	268	1.1	1,323	0.4	
Linguistics	2,727	0.3	228	0.3	24	1.2	175	0.3	81	0.2	3	0.4	1,070	0.4	72	0.4	80	0.3	994	0.3	
Political science and government	7,684	0.9	782	1.1	12	0.6	342	0.5	477	1.0	6	0.8	3,335	1.2	246	1.2	222	0.9	2,262	0.7	
Public policy analysis	7,370	0.9	829	1.2	27	1.4	497	0.8	920	2.0	9	1.2	3,149	1.2	226	1.1	387	1.6	1,326	0.4	
Sociology and population studies	6,404	0.8	948	1.3	21	1.1	327	0.5	844	1.8	9	1.2	2,473	0.9	242	1.2	180	0.7	1,360	0.4	
Urban studies and affairs	966	0.1	85	0.1	3	0.2	56	0.1	176	0.4	1	0.1	440	0.2	23	0.1	28	0.1	154	*	
Social sciences, other	4,214	0.5	346	0.5	11	0.6	331	0.5	414	0.9	6	0.8	1,366	0.5	97	0.5	129	0.5	1,514	0.5	
Engineering	175,559	21.5	10,604	15.1	221	11.1	13,441	21.5	4,730	10.2	80	10.6	46,915	17.4	3,628	18.1	3,850	15.8	92,090	28.6	
Aerospace, aeronautical, and astronautical engineering	8,264	1.0	778	1.1	13	0.7	907	1.5	181	0.4	8	1.1	3,873	1.4	289	1.4	178	0.7	2,037	0.6	
Biological, biomedical, and biosystems engineering	15,203	1.9	1,220	1.7	20	1.0	1,972	3.2	587	1.3	9	1.2	4,942	1.8	440	2.2	434	1.8	5,579	1.7	
Chemical, petroleum, and chemical-related engineering	10,546	1.3	520	0.7	11	0.6	920	1.5	222	0.5	5	0.7	2,846	1.1	192	1.0	183	0.8	5,647	1.8	
Chemical engineering	9,701	1.2	497	0.7	9	0.5	895	1.4	204	0.4	5	0.7	2,739	1.0	188	0.9	169	0.7	4,995	1.5	
Petroleum engineering	845	0.1	23	*	2	0.1	25	*	18	*	0	0.0	107	*	4	*	14	0.1	652	0.2	
Civil, environmental, transportation and related engineering fields	19,934	2.4	1,353	1.9	54	2.7	1,063	1.7	500	1.1	14	1.9	5,331	2.0	360	1.8	318	1.3	10,941	3.4	
Civil engineering	15,851	1.9	1,065	1.5	39	2.0	880	1.4	371	0.8	11	1.5	4,132	1.5	255	1.3	242	1.0	8,856	2.7	
Architectural, environmental, construction and surveying engineering	4,083	0.5	288	0.4	15	0.8	183	0.3	129	0.3	3	0.4	1,199	0.4	105	0.5	76	0.3	2,085	0.6	
Electrical, electronics, communications and computer engineering	48,799	6.0	2,124	3.0	31	1.6	3,692	5.9	1,067	2.3	18	2.4	8,610	3.2	752	3.8	969	4.0	31,536	9.8	
Electrical, electronics, and communications engineering	32,988	4.0	1,609	2.3	25	1.3	2,702	4.3	811	1.8	13	1.7	6,760	2.5	598	3.0	634	2.6	19,836	6.2	
Computer engineering	15,811	1.9	515	0.7	6	0.3	990	1.6	256	0.6	5	0.7	1,850	0.7	154	0.8	335	1.4	11,700	3.6	
Industrial, manufacturing, systems engineering and operations research	15,762	1.9	1,121	1.6	13	0.7	970	1.6	542	1.2	4	0.5	4,084	1.5	280	1.4	484	2.0	8,264	2.6	

TABLE 4-4a
Citizenship, ethnicity, and race of graduate students, by detailed field: 2023
 (Number and percent)

Detailed field	U.S. citizens and permanent residents																				Temporary visa holders	
	Total		Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race					
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race							
					Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			Number	Percent		
Industrial and manufacturing engineering	8,113	1.0	485	0.7	5	0.3	310	0.5	211	0.5	1	0.1	1,437	0.5	91	0.5	97	0.4	5,476	1.7		
Systems engineering and operations research	7,649	0.9	636	0.9	8	0.4	660	1.1	331	0.7	3	0.4	2,647	1.0	189	0.9	387	1.6	2,788	0.9		
Mechanical engineering	27,014	3.3	1,839	2.6	33	1.7	2,045	3.3	586	1.3	11	1.5	8,051	3.0	673	3.4	506	2.1	13,270	4.1		
Metallurgical, mining, materials and related engineering fields	7,244	0.9	521	0.7	12	0.6	545	0.9	181	0.4	3	0.4	2,338	0.9	186	0.9	142	0.6	3,316	1.0		
Other engineering	22,793	2.8	1,128	1.6	34	1.7	1,327	2.1	864	1.9	8	1.1	6,840	2.5	456	2.3	636	2.6	11,500	3.6		
Agricultural engineering	1,032	0.1	40	0.1	2	0.1	38	0.1	20	*	1	0.1	308	0.1	29	0.1	14	0.1	580	0.2		
Engineering mechanics, physics, and science	2,390	0.3	124	0.2	3	0.2	186	0.3	71	0.2	1	0.1	690	0.3	62	0.3	38	0.2	1,215	0.4		
Nuclear engineering	1,606	0.2	130	0.2	3	0.2	77	0.1	34	0.1	0	0.0	886	0.3	68	0.3	37	0.2	371	0.1		
Engineering, other	17,765	2.2	834	1.2	26	1.3	1,026	1.6	739	1.6	6	0.8	4,956	1.8	297	1.5	547	2.2	9,334	2.9		
Health	81,047	9.9	10,330	14.7	351	17.7	7,235	11.6	9,064	19.6	102	13.5	37,035	13.7	2,410	12.0	3,786	15.6	10,734	3.3		
Clinical medicine	34,658	4.2	4,538	6.4	226	11.4	3,953	6.3	5,120	11.1	57	7.6	13,548	5.0	1,207	6.0	1,981	8.1	4,028	1.2		
Medical clinical sciences and clinical and medical laboratory sciences	2,117	0.3	199	0.3	10	0.5	273	0.4	250	0.5	2	0.3	991	0.4	53	0.3	90	0.4	249	0.1		
Public health	32,541	4.0	4,339	6.2	216	10.9	3,680	5.9	4,870	10.5	55	7.3	12,557	4.7	1,154	5.8	1,891	7.8	3,779	1.2		
Other health	46,389	5.7	5,792	8.2	125	6.3	3,282	5.2	3,944	8.5	45	6.0	23,487	8.7	1,203	6.0	1,805	7.4	6,706	2.1		
Communication disorders sciences	19,109	2.3	3,026	4.3	52	2.6	967	1.5	1,024	2.2	14	1.9	12,196	4.5	513	2.6	837	3.4	480	0.1		
Dental sciences	2,231	0.3	284	0.4	2	0.1	367	0.6	78	0.2	2	0.3	892	0.3	47	0.2	126	0.5	433	0.1		
Kinesiology and exercise science	5,254	0.6	774	1.1	28	1.4	154	0.2	622	1.3	8	1.1	2,647	1.0	200	1.0	136	0.6	685	0.2		
Nursing science	5,510	0.7	540	0.8	17	0.9	417	0.7	765	1.7	7	0.9	2,950	1.1	117	0.6	192	0.8	505	0.2		
Pharmaceutical sciences	5,219	0.6	283	0.4	6	0.3	457	0.7	400	0.9	2	0.3	1,379	0.5	127	0.6	135	0.6	2,430	0.8		
Other health nec	9,066	1.1	885	1.3	20	1.0	920	1.5	1,055	2.3	12	1.6	3,423	1.3	199	1.0	379	1.6	2,173	0.7		

* = value < 0.05%; ne = not eligible.

nec = not elsewhere classified.

Note(s):
 Percentages may not add to total because of rounding. Ethnicity and race data are available only for U.S. citizens and permanent residents. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):
 National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino								Unknown ethnicity and race							
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander				White		More than one race			
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
All detailed fields	510,866	100.0	48,099	100.0	1,211	100.0	40,930	100.0	31,764	100.0	544	100.0	163,247	100.0	12,120	100.0	15,694	100.0	197,257	100.0
Science	348,520	68.2	32,310	67.2	808	66.7	26,885	65.7	22,048	69.4	413	75.9	105,997	64.9	7,998	66.0	10,264	65.4	141,797	71.9
Agricultural and veterinary sciences	6,901	1.4	653	1.4	27	2.2	236	0.6	323	1.0	16	2.9	3,702	2.3	169	1.4	165	1.1	1,610	0.8
Agricultural sciences	6,218	1.2	586	1.2	27	2.2	203	0.5	290	0.9	15	2.8	3,336	2.0	156	1.3	129	0.8	1,476	0.7
Veterinary biomedical and clinical sciences	683	0.1	67	0.1	0	0.0	33	0.1	33	0.1	1	0.2	366	0.2	13	0.1	36	0.2	134	0.1
Biological and biomedical sciences	44,703	8.8	5,086	10.6	125	10.3	4,966	12.1	3,905	12.3	61	11.2	18,362	11.2	1,525	12.6	1,609	10.3	9,064	4.6
Biochemistry	778	0.2	98	0.2	1	0.1	58	0.1	42	0.1	0	0.0	283	0.2	21	0.2	36	0.2	239	0.1
Biology	7,988	1.6	1,092	2.3	17	1.4	558	1.4	567	1.8	18	3.3	4,298	2.6	297	2.5	236	1.5	905	0.5
Biomedical sciences	6,391	1.3	827	1.7	27	2.2	1,092	2.7	973	3.1	6	1.1	2,043	1.3	221	1.8	214	1.4	988	0.5
Biophysics	9	*	0	0.0	0	0.0	0	0.0	1	*	0	0.0	5	*	0	0.0	0	0.0	3	*
Biostatistics and bioinformatics	4,240	0.8	245	0.5	3	0.2	617	1.5	142	0.4	2	0.4	1,128	0.7	85	0.7	126	0.8	1,892	1.0
Biotechnology	4,420	0.9	434	0.9	14	1.2	595	1.5	367	1.2	4	0.7	1,214	0.7	121	1.0	236	1.5	1,435	0.7
Botany and plant biology	378	0.1	25	0.1	1	0.1	12	*	9	*	0	0.0	195	0.1	23	0.2	8	0.1	105	0.1
Cell, cellular biology, and anatomical sciences	1,031	0.2	132	0.3	8	0.7	123	0.3	78	0.2	2	0.4	421	0.3	39	0.3	48	0.3	180	0.1
Ecology and population biology	1,035	0.2	81	0.2	7	0.6	27	0.1	27	0.1	3	0.6	764	0.5	46	0.4	21	0.1	59	*
Epidemiology	3,837	0.8	398	0.8	13	1.1	539	1.3	355	1.1	5	0.9	1,292	0.8	138	1.1	109	0.7	988	0.5
Genetics	693	0.1	54	0.1	1	0.1	67	0.2	37	0.1	0	0.0	401	0.2	28	0.2	25	0.2	80	*
Microbiological sciences and immunology	1,934	0.4	295	0.6	5	0.4	162	0.4	131	0.4	2	0.4	913	0.6	77	0.6	104	0.7	245	0.1
Molecular biology	388	0.1	56	0.1	0	0.0	47	0.1	40	0.1	1	0.2	143	0.1	20	0.2	8	0.1	73	*
Neurobiology and neuroscience	480	0.1	74	0.2	2	0.2	81	0.2	42	0.1	0	0.0	189	0.1	14	0.1	14	0.1	64	*
Nutrition science	2,959	0.6	371	0.8	7	0.6	230	0.6	145	0.5	6	1.1	1,647	1.0	91	0.8	145	0.9	317	0.2
Pathology and experimental pathology	143	*	43	0.1	1	0.1	11	*	9	*	0	0.0	50	*	2	*	2	*	25	*
Pharmacology and toxicology	844	0.2	67	0.1	2	0.2	80	0.2	50	0.2	1	0.2	285	0.2	20	0.2	34	0.2	305	0.2
Physiology	2,951	0.6	274	0.6	5	0.4	277	0.7	262	0.8	6	1.1	1,311	0.8	121	1.0	109	0.7	586	0.3
Zoology and animal biology	901	0.2	81	0.2	4	0.3	31	0.1	19	0.1	0	0.0	610	0.4	48	0.4	15	0.1	93	*
Biological and biomedical sciences nec	3,303	0.6	439	0.9	7	0.6	359	0.9	609	1.9	5	0.9	1,170	0.7	113	0.9	119	0.8	482	0.2
Computer and information sciences	143,530	28.1	5,425	11.3	141	11.6	12,577	30.7	5,529	17.4	75	13.8	20,179	12.4	1,784	14.7	3,336	21.3	94,484	47.9
Artificial intelligence, informatics, and computer and information science topics	6,433	1.3	266	0.6	9	0.7	612	1.5	242	0.8	5	0.9	1,112	0.7	114	0.9	115	0.7	3,958	2.0
Computer and information sciences	41,959	8.2	1,437	3.0	26	2.1	4,526	11.1	909	2.9	17	3.1	6,409	3.9	553	4.6	712	4.5	27,370	13.9
Computer and information systems security	10,774	2.1	1,015	2.1	33	2.7	1,068	2.6	1,670	5.3	20	3.7	3,033	1.9	293	2.4	497	3.2	3,145	1.6
Computer science	46,477	9.1	1,010	2.1	20	1.7	3,539	8.6	633	2.0	12	2.2	4,015	2.5	380	3.1	956	6.1	35,912	18.2

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																	Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race				
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race						
					Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			Number		
Information science and studies	16,138	3.2	804	1.7	15	1.2	1,424	3.5	1,304	4.1	15	2.8	3,111	1.9	232	1.9	767	4.9	8,466	4.3	
Information technology	14,484	2.8	512	1.1	31	2.6	923	2.3	504	1.6	6	1.1	1,282	0.8	116	1.0	158	1.0	10,952	5.6	
Computer and information sciences nec	7,265	1.4	381	0.8	7	0.6	485	1.2	267	0.8	0	0.0	1,217	0.7	96	0.8	131	0.8	4,681	2.4	
Geosciences, atmospheric sciences, and ocean sciences	4,793	0.9	582	1.2	19	1.6	159	0.4	143	0.5	3	0.6	2,985	1.8	189	1.6	129	0.8	584	0.3	
Atmospheric sciences and meteorology	441	0.1	35	0.1	0	0.0	16	*	16	0.1	1	0.2	300	0.2	16	0.1	5	*	52	*	
Geological and earth sciences	2,984	0.6	354	0.7	15	1.2	93	0.2	86	0.3	1	0.2	1,825	1.1	104	0.9	85	0.5	421	0.2	
Ocean and marine sciences	1,368	0.3	193	0.4	4	0.3	50	0.1	41	0.1	1	0.2	860	0.5	69	0.6	39	0.2	111	0.1	
Geosciences, atmospheric sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne
Mathematics and statistics	20,105	3.9	1,250	2.6	27	2.2	1,553	3.8	548	1.7	11	2.0	4,917	3.0	321	2.6	459	2.9	11,019	5.6	
Applied mathematics	8,977	1.8	433	0.9	9	0.7	568	1.4	173	0.5	5	0.9	1,509	0.9	110	0.9	196	1.2	5,974	3.0	
Mathematics	3,623	0.7	395	0.8	14	1.2	250	0.6	157	0.5	3	0.6	1,742	1.1	83	0.7	117	0.7	862	0.4	
Statistics	7,505	1.5	422	0.9	4	0.3	735	1.8	218	0.7	3	0.6	1,666	1.0	128	1.1	146	0.9	4,183	2.1	
Multidisciplinary and interdisciplinary sciences	21,928	4.3	1,596	3.3	33	2.7	2,071	5.1	1,206	3.8	20	3.7	6,085	3.7	448	3.7	605	3.9	9,864	5.0	
Biological and physical sciences	921	0.2	88	0.2	3	0.2	132	0.3	65	0.2	3	0.6	365	0.2	40	0.3	31	0.2	194	0.1	
Computational science	2,939	0.6	177	0.4	4	0.3	242	0.6	70	0.2	4	0.7	834	0.5	51	0.4	39	0.2	1,518	0.8	
Data science and data analytics	10,243	2.0	609	1.3	11	0.9	1,051	2.6	504	1.6	3	0.6	2,381	1.5	158	1.3	346	2.2	5,180	2.6	
International and global studies	865	0.2	157	0.3	7	0.6	83	0.2	70	0.2	5	0.9	283	0.2	35	0.3	21	0.1	204	0.1	
Multidisciplinary and interdisciplinary sciences nec	6,960	1.4	565	1.2	8	0.7	563	1.4	497	1.6	5	0.9	2,222	1.4	164	1.4	168	1.1	2,768	1.4	
Natural resources and conservation	9,486	1.9	953	2.0	76	6.3	295	0.7	306	1.0	23	4.2	6,091	3.7	350	2.9	215	1.4	1,177	0.6	
Environmental science and studies	4,359	0.9	508	1.1	45	3.7	184	0.4	157	0.5	20	3.7	2,596	1.6	150	1.2	103	0.7	596	0.3	
Forestry, natural resources, and conservation	5,127	1.0	445	0.9	31	2.6	111	0.3	149	0.5	3	0.6	3,495	2.1	200	1.7	112	0.7	581	0.3	
Physical sciences	6,000	1.2	716	1.5	5	0.4	418	1.0	315	1.0	6	1.1	2,601	1.6	182	1.5	179	1.1	1,578	0.8	
Astronomy and astrophysics	100	*	16	*	0	0.0	9	*	4	*	1	0.2	50	*	5	*	1	*	14	*	
Chemistry	2,891	0.6	374	0.8	1	0.1	217	0.5	206	0.6	4	0.7	1,135	0.7	85	0.7	76	0.5	793	0.4	
Materials sciences	373	0.1	21	*	1	0.1	43	0.1	6	*	0	0.0	104	0.1	6	*	15	0.1	177	0.1	
Physics	2,179	0.4	273	0.6	3	0.2	129	0.3	84	0.3	1	0.2	1,007	0.6	71	0.6	76	0.5	535	0.3	
Physical sciences nec	457	0.1	32	0.1	0	0.0	20	*	15	*	0	0.0	305	0.2	15	0.1	11	0.1	59	*	
Psychology	49,474	9.7	10,496	21.8	190	15.7	2,544	6.2	5,722	18.0	120	22.1	23,337	14.3	1,708	14.1	2,253	14.4	3,104	1.6	
Applied psychology	20,430	4.0	4,637	9.6	64	5.3	1,009	2.5	2,079	6.5	55	10.1	10,036	6.1	619	5.1	1,107	7.1	824	0.4	
Clinical psychology	4,603	0.9	1,104	2.3	12	1.0	327	0.8	336	1.1	16	2.9	2,205	1.4	219	1.8	217	1.4	167	0.1	
Counseling psychology	13,161	2.6	2,914	6.1	75	6.2	593	1.4	2,089	6.6	25	4.6	6,081	3.7	422	3.5	602	3.8	360	0.2	

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																	Temporary visa holders	
			Not Hispanic or Latino														Unknown ethnicity and race				
			Hispanic or Latino		American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race						
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			Number		
Human development	1,321	0.3	187	0.4	10	0.8	59	0.1	112	0.4	1	0.2	739	0.5	58	0.5	64	0.4	91	*	
Psychology, general	7,321	1.4	1,256	2.6	23	1.9	352	0.9	874	2.8	21	3.9	3,188	2.0	309	2.5	206	1.3	1,092	0.6	
Research and experimental psychology	2,638	0.5	398	0.8	6	0.5	204	0.5	232	0.7	2	0.4	1,088	0.7	81	0.7	57	0.4	570	0.3	
Social sciences	41,600	8.1	5,553	11.5	165	13.6	2,066	5.0	4,051	12.8	78	14.3	17,738	10.9	1,322	10.9	1,314	8.4	9,313	4.7	
Agricultural and natural resource economics	436	0.1	38	0.1	2	0.2	6	*	20	0.1	0	0.0	181	0.1	10	0.1	8	0.1	171	0.1	
Anthropology	1,971	0.4	305	0.6	18	1.5	43	0.1	73	0.2	1	0.2	1,260	0.8	105	0.9	47	0.3	119	0.1	
Area, ethnic, cultural, gender, and group studies	2,582	0.5	510	1.1	43	3.6	124	0.3	250	0.8	26	4.8	863	0.5	122	1.0	58	0.4	586	0.3	
Criminal justice and safety studies	4,942	1.0	939	2.0	16	1.3	122	0.3	1,064	3.3	12	2.2	2,258	1.4	174	1.4	245	1.6	112	0.1	
Criminology	1,161	0.2	253	0.5	7	0.6	40	0.1	144	0.5	1	0.2	545	0.3	46	0.4	25	0.2	100	0.1	
Economics (except agricultural and natural resource)	6,398	1.3	369	0.8	6	0.5	296	0.7	200	0.6	6	1.1	1,537	0.9	103	0.8	119	0.8	3,762	1.9	
Geography and cartography	2,517	0.5	228	0.5	8	0.7	84	0.2	104	0.3	3	0.6	1,496	0.9	84	0.7	102	0.6	408	0.2	
International relations and national security studies	7,147	1.4	965	2.0	12	1.0	433	1.1	560	1.8	15	2.8	3,457	2.1	240	2.0	256	1.6	1,209	0.6	
Linguistics	1,117	0.2	141	0.3	12	1.0	82	0.2	44	0.1	2	0.4	515	0.3	29	0.2	44	0.3	248	0.1	
Political science and government	2,649	0.5	424	0.9	7	0.6	106	0.3	255	0.8	4	0.7	1,320	0.8	86	0.7	82	0.5	365	0.2	
Public policy analysis	4,645	0.9	619	1.3	13	1.1	338	0.8	452	1.4	3	0.6	2,234	1.4	143	1.2	164	1.0	679	0.3	
Sociology and population studies	1,888	0.4	395	0.8	10	0.8	64	0.2	376	1.2	3	0.6	694	0.4	79	0.7	54	0.3	213	0.1	
Urban studies and affairs	648	0.1	66	0.1	2	0.2	40	0.1	136	0.4	0	0.0	316	0.2	19	0.2	18	0.1	51	*	
Social sciences, other	3,499	0.7	301	0.6	9	0.7	288	0.7	373	1.2	2	0.4	1,062	0.7	82	0.7	92	0.6	1,290	0.7	
Engineering	100,567	19.7	7,204	15.0	138	11.4	8,305	20.3	2,894	9.1	50	9.2	28,366	17.4	2,191	18.1	2,380	15.2	49,039	24.9	
Aerospace, aeronautical, and astronautical engineering	5,380	1.1	588	1.2	7	0.6	669	1.6	117	0.4	6	1.1	2,712	1.7	193	1.6	130	0.8	958	0.5	
Biological, biomedical, and biosystems engineering	5,204	1.0	459	1.0	8	0.7	770	1.9	225	0.7	3	0.6	1,663	1.0	156	1.3	111	0.7	1,809	0.9	
Chemical, petroleum, and chemical-related engineering	2,658	0.5	165	0.3	3	0.2	277	0.7	65	0.2	2	0.4	723	0.4	54	0.4	61	0.4	1,308	0.7	
Chemical engineering	2,271	0.4	145	0.3	1	0.1	265	0.6	52	0.2	2	0.4	652	0.4	51	0.4	55	0.4	1,048	0.5	
Petroleum engineering	387	0.1	20	*	2	0.2	12	*	13	*	0	0.0	71	*	3	*	6	*	260	0.1	
Civil, environmental, transportation and related engineering fields	12,082	2.4	1,081	2.2	39	3.2	766	1.9	338	1.1	8	1.5	3,889	2.4	254	2.1	213	1.4	5,494	2.8	
Civil engineering	9,149	1.8	856	1.8	28	2.3	629	1.5	239	0.8	6	1.1	2,975	1.8	186	1.5	156	1.0	4,074	2.1	
Architectural, environmental, construction and surveying engineering	2,933	0.6	225	0.5	11	0.9	137	0.3	99	0.3	2	0.4	914	0.6	68	0.6	57	0.4	1,420	0.7	
Electrical, electronics, communications and computer engineering	31,093	6.1	1,617	3.4	25	2.1	2,610	6.4	756	2.4	13	2.4	5,657	3.5	512	4.2	663	4.2	19,240	9.8	
Electrical, electronics, and communications engineering	18,215	3.6	1,173	2.4	20	1.7	1,793	4.4	551	1.7	10	1.8	4,290	2.6	399	3.3	369	2.4	9,610	4.9	
Computer engineering	12,878	2.5	444	0.9	5	0.4	817	2.0	205	0.6	3	0.6	1,367	0.8	113	0.9	294	1.9	9,630	4.9	
Industrial, manufacturing, systems engineering and operations research	11,873	2.3	1,006	2.1	10	0.8	756	1.8	391	1.2	3	0.6	3,220	2.0	222	1.8	404	2.6	5,861	3.0	

TABLE 4-4b

Citizenship, ethnicity, and race of master's students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																Temporary visa holders	
			Hispanic or Latino		Not Hispanic or Latino										Unknown ethnicity and race					
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White				More than one race			
					Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			Number	Percent		
Industrial and manufacturing engineering	5,821	1.1	417	0.9	3	0.2	229	0.6	128	0.4	1	0.2	1,048	0.6	76	0.6	65	0.4	3,854	2.0
Systems engineering and operations research	6,052	1.2	589	1.2	7	0.6	527	1.3	263	0.8	2	0.4	2,172	1.3	146	1.2	339	2.2	2,007	1.0
Mechanical engineering	15,335	3.0	1,288	2.7	21	1.7	1,389	3.4	365	1.1	9	1.7	5,193	3.2	450	3.7	302	1.9	6,318	3.2
Metallurgical, mining, materials and related engineering fields	2,462	0.5	219	0.5	6	0.5	200	0.5	74	0.2	2	0.4	918	0.6	70	0.6	71	0.5	902	0.5
Other engineering	14,480	2.8	781	1.6	19	1.6	868	2.1	563	1.8	4	0.7	4,391	2.7	280	2.3	425	2.7	7,149	3.6
Agricultural engineering	377	0.1	23	*	1	0.1	18	*	12	*	0	0.0	162	0.1	19	0.2	5	*	137	0.1
Engineering mechanics, physics, and science	696	0.1	49	0.1	0	0.0	49	0.1	32	0.1	0	0.0	219	0.1	20	0.2	9	0.1	318	0.2
Nuclear engineering	516	0.1	47	0.1	1	0.1	29	0.1	8	*	0	0.0	336	0.2	25	0.2	10	0.1	60	*
Engineering, other	12,891	2.5	662	1.4	17	1.4	772	1.9	511	1.6	4	0.7	3,674	2.3	216	1.8	401	2.6	6,634	3.4
Health	61,779	12.1	8,585	17.8	265	21.9	5,740	14.0	6,822	21.5	81	14.9	28,884	17.7	1,931	15.9	3,050	19.4	6,421	3.3
Clinical medicine	28,484	5.6	3,867	8.0	173	14.3	3,400	8.3	4,190	13.2	46	8.5	11,240	6.9	1,000	8.3	1,794	11.4	2,774	1.4
Medical clinical sciences and clinical and medical laboratory sciences	1,242	0.2	91	0.2	5	0.4	191	0.5	178	0.6	0	0.0	571	0.3	30	0.2	54	0.3	122	0.1
Public health	27,242	5.3	3,776	7.9	168	13.9	3,209	7.8	4,012	12.6	46	8.5	10,669	6.5	970	8.0	1,740	11.1	2,652	1.3
Other health	33,295	6.5	4,718	9.8	92	7.6	2,340	5.7	2,632	8.3	35	6.4	17,644	10.8	931	7.7	1,256	8.0	3,647	1.8
Communication disorders sciences	18,183	3.6	2,929	6.1	52	4.3	916	2.2	952	3.0	14	2.6	11,710	7.2	500	4.1	816	5.2	294	0.1
Dental sciences	1,420	0.3	94	0.2	1	0.1	244	0.6	53	0.2	2	0.4	658	0.4	41	0.3	46	0.3	281	0.1
Kinesiology and exercise science	4,286	0.8	704	1.5	26	2.1	122	0.3	572	1.8	8	1.5	2,133	1.3	178	1.5	114	0.7	429	0.2
Nursing science	1,701	0.3	270	0.6	1	0.1	174	0.4	230	0.7	2	0.4	906	0.6	38	0.3	53	0.3	27	*
Pharmaceutical sciences	2,265	0.4	150	0.3	3	0.2	209	0.5	248	0.8	2	0.4	673	0.4	70	0.6	43	0.3	867	0.4
Other health nec	5,440	1.1	571	1.2	9	0.7	675	1.6	577	1.8	7	1.3	1,564	1.0	104	0.9	184	1.2	1,749	0.9

* = value < 0.05%; ne = not eligible.

nec = not elsewhere classified.

Note(s):

Percentages may not add to total because of rounding. Ethnicity and race data are available only for U.S. citizens and permanent residents. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																	Temporary visa holders		
			Hispanic or Latino		Not Hispanic or Latino														Unknown ethnicity and race			
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race							
					Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent				Number
All detailed fields	307,229	100.0	22,329	100.0	773	100.0	21,619	100.0	14,512	100.0	210	100.0	106,230	100.0	7,884	100.0	8,642	100.0	125,030	100.0		
Science	212,969	69.3	17,184	77.0	604	78.1	14,988	69.3	10,434	71.9	159	75.7	79,530	74.9	5,968	75.7	6,436	74.5	77,666	62.1		
Agricultural and veterinary sciences	4,854	1.6	243	1.1	14	1.8	136	0.6	99	0.7	1	0.5	1,755	1.7	75	1.0	70	0.8	2,461	2.0		
Agricultural sciences	4,354	1.4	214	1.0	14	1.8	118	0.5	89	0.6	1	0.5	1,566	1.5	67	0.8	61	0.7	2,224	1.8		
Veterinary biomedical and clinical sciences	500	0.2	29	0.1	0	0.0	18	0.1	10	0.1	0	0.0	189	0.2	8	0.1	9	0.1	237	0.2		
Biological and biomedical sciences	60,863	19.8	5,951	26.7	159	20.6	5,637	26.1	2,605	18.0	51	24.3	25,726	24.2	1,919	24.3	1,633	18.9	17,182	13.7		
Biochemistry	4,985	1.6	502	2.2	23	3.0	446	2.1	185	1.3	5	2.4	2,094	2.0	163	2.1	101	1.2	1,466	1.2		
Biology	7,543	2.5	700	3.1	18	2.3	475	2.2	272	1.9	3	1.4	3,323	3.1	237	3.0	140	1.6	2,375	1.9		
Biomedical sciences	5,415	1.8	506	2.3	15	1.9	536	2.5	304	2.1	1	0.5	2,159	2.0	156	2.0	131	1.5	1,607	1.3		
Biophysics	943	0.3	85	0.4	1	0.1	112	0.5	22	0.2	0	0.0	346	0.3	40	0.5	37	0.4	300	0.2		
Biostatistics and bioinformatics	4,043	1.3	200	0.9	1	0.1	541	2.5	92	0.6	6	2.9	1,062	1.0	106	1.3	132	1.5	1,903	1.5		
Biotechnology	123	*	11	*	1	0.1	9	*	5	*	1	0.5	48	*	4	0.1	3	*	41	*		
Botany and plant biology	1,299	0.4	113	0.5	3	0.4	62	0.3	34	0.2	1	0.5	575	0.5	34	0.4	37	0.4	440	0.4		
Cell, cellular biology, and anatomical sciences	5,447	1.8	669	3.0	13	1.7	552	2.6	216	1.5	9	4.3	2,234	2.1	157	2.0	176	2.0	1,421	1.1		
Ecology and population biology	2,798	0.9	267	1.2	8	1.0	157	0.7	96	0.7	2	1.0	1,500	1.4	96	1.2	55	0.6	617	0.5		
Epidemiology	2,301	0.7	167	0.7	5	0.6	264	1.2	183	1.3	2	1.0	818	0.8	57	0.7	78	0.9	727	0.6		
Genetics	2,494	0.8	269	1.2	9	1.2	258	1.2	113	0.8	1	0.5	1,108	1.0	86	1.1	55	0.6	595	0.5		
Microbiological sciences and immunology	4,654	1.5	536	2.4	15	1.9	451	2.1	221	1.5	1	0.5	2,221	2.1	149	1.9	122	1.4	938	0.8		
Molecular biology	1,280	0.4	155	0.7	2	0.3	148	0.7	51	0.4	1	0.5	513	0.5	45	0.6	27	0.3	338	0.3		
Neurobiology and neuroscience	6,100	2.0	743	3.3	11	1.4	640	3.0	295	2.0	5	2.4	2,746	2.6	242	3.1	176	2.0	1,242	1.0		
Nutrition science	1,109	0.4	81	0.4	0	0.0	71	0.3	53	0.4	1	0.5	412	0.4	27	0.3	23	0.3	441	0.4		
Pathology and experimental pathology	963	0.3	97	0.4	2	0.3	78	0.4	46	0.3	3	1.4	419	0.4	29	0.4	62	0.7	227	0.2		
Pharmacology and toxicology	2,460	0.8	261	1.2	11	1.4	248	1.1	154	1.1	0	0.0	1,028	1.0	80	1.0	83	1.0	595	0.5		
Physiology	3,150	1.0	274	1.2	8	1.0	329	1.5	126	0.9	4	1.9	1,360	1.3	77	1.0	89	1.0	883	0.7		
Zoology and animal biology	1,141	0.4	86	0.4	1	0.1	40	0.2	31	0.2	0	0.0	593	0.6	47	0.6	26	0.3	317	0.3		
Biological and biomedical sciences nec	2,615	0.9	229	1.0	12	1.6	220	1.0	106	0.7	5	2.4	1,167	1.1	87	1.1	80	0.9	709	0.6		
Computer and information sciences	22,484	7.3	634	2.8	27	3.5	1,855	8.6	822	5.7	12	5.7	4,258	4.0	382	4.8	623	7.2	13,871	11.1		
Artificial intelligence, informatics, and computer and information science topics	942	0.3	20	0.1	1	0.1	98	0.5	35	0.2	0	0.0	209	0.2	18	0.2	29	0.3	532	0.4		
Computer and information sciences	7,247	2.4	204	0.9	6	0.8	480	2.2	238	1.6	4	1.9	1,304	1.2	94	1.2	184	2.1	4,733	3.8		
Computer and information systems security	724	0.2	59	0.3	9	1.2	74	0.3	183	1.3	0	0.0	244	0.2	22	0.3	39	0.5	94	0.1		
Computer science	11,342	3.7	248	1.1	4	0.5	1,018	4.7	183	1.3	5	2.4	1,977	1.9	191	2.4	317	3.7	7,399	5.9		
Information science and studies	1,522	0.5	82	0.4	6	0.8	123	0.6	125	0.9	3	1.4	400	0.4	42	0.5	35	0.4	706	0.6		

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2023

(Number and percent)

Detailed field	U.S. citizens and permanent residents																			
	Total		Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race		Temporary visa holders	
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Information technology	590	0.2	18	0.1	1	0.1	50	0.2	37	0.3	0	0.0	89	0.1	15	0.2	14	0.2	366	0.3
Computer and information sciences nec	117	*	3	*	0	0.0	12	0.1	21	0.1	0	0.0	35	*	0	0.0	5	0.1	41	*
Geosciences, atmospheric sciences, and ocean sciences	6,801	2.2	550	2.5	10	1.3	256	1.2	168	1.2	2	1.0	3,216	3.0	265	3.4	175	2.0	2,159	1.7
Atmospheric sciences and meteorology	990	0.3	63	0.3	0	0.0	34	0.2	36	0.2	0	0.0	468	0.4	34	0.4	24	0.3	331	0.3
Geological and earth sciences	4,256	1.4	361	1.6	7	0.9	170	0.8	92	0.6	0	0.0	1,906	1.8	146	1.9	82	0.9	1,492	1.2
Ocean and marine sciences	1,555	0.5	126	0.6	3	0.4	52	0.2	40	0.3	2	1.0	842	0.8	85	1.1	69	0.8	336	0.3
Geosciences, atmospheric sciences, and ocean sciences nec	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne	ne
Mathematics and statistics	13,788	4.5	708	3.2	11	1.4	1,010	4.7	220	1.5	4	1.9	4,158	3.9	274	3.5	360	4.2	7,043	5.6
Applied mathematics	2,163	0.7	119	0.5	1	0.1	145	0.7	47	0.3	1	0.5	660	0.6	56	0.7	53	0.6	1,081	0.9
Mathematics	8,178	2.7	480	2.1	4	0.5	592	2.7	131	0.9	2	1.0	2,863	2.7	177	2.2	215	2.5	3,714	3.0
Statistics	3,447	1.1	109	0.5	6	0.8	273	1.3	42	0.3	1	0.5	635	0.6	41	0.5	92	1.1	2,248	1.8
Multidisciplinary and interdisciplinary sciences	4,501	1.5	339	1.5	10	1.3	321	1.5	252	1.7	5	2.4	1,729	1.6	126	1.6	126	1.5	1,593	1.3
Biological and physical sciences	975	0.3	66	0.3	1	0.1	95	0.4	31	0.2	3	1.4	383	0.4	29	0.4	25	0.3	342	0.3
Computational science	289	0.1	18	0.1	0	0.0	17	0.1	7	*	0	0.0	101	0.1	5	0.1	14	0.2	127	0.1
Data science and data analytics	173	0.1	4	*	0	0.0	17	0.1	5	*	0	0.0	31	*	3	*	2	*	111	0.1
International and global studies	131	*	34	0.2	0	0.0	8	*	12	0.1	0	0.0	25	*	2	*	4	*	46	*
Multidisciplinary and interdisciplinary sciences nec	2,933	1.0	217	1.0	9	1.2	184	0.9	197	1.4	2	1.0	1,189	1.1	87	1.1	81	0.9	967	0.8
Natural resources and conservation	4,004	1.3	287	1.3	44	5.7	153	0.7	158	1.1	3	1.4	1,960	1.8	99	1.3	126	1.5	1,174	0.9
Environmental science and studies	1,989	0.6	174	0.8	15	1.9	100	0.5	98	0.7	1	0.5	952	0.9	47	0.6	69	0.8	533	0.4
Forestry, natural resources, and conservation	2,015	0.7	113	0.5	29	3.8	53	0.2	60	0.4	2	1.0	1,008	0.9	52	0.7	57	0.7	641	0.5
Physical sciences	38,329	12.5	2,547	11.4	41	5.3	2,403	11.1	818	5.6	13	6.2	14,101	13.3	942	11.9	795	9.2	16,669	13.3
Astronomy and astrophysics	1,557	0.5	153	0.7	6	0.8	112	0.5	48	0.3	2	1.0	741	0.7	74	0.9	48	0.6	373	0.3
Chemistry	20,116	6.5	1,463	6.6	18	2.3	1,327	6.1	455	3.1	10	4.8	7,255	6.8	473	6.0	409	4.7	8,706	7.0
Materials sciences	1,198	0.4	52	0.2	0	0.0	94	0.4	35	0.2	1	0.5	348	0.3	26	0.3	24	0.3	618	0.5
Physics	14,940	4.9	864	3.9	17	2.2	852	3.9	222	1.5	0	0.0	5,602	5.3	363	4.6	309	3.6	6,711	5.4
Physical sciences nec	518	0.2	15	0.1	0	0.0	18	0.1	58	0.4	0	0.0	155	0.1	6	0.1	5	0.1	261	0.2
Psychology	24,354	7.9	3,307	14.8	113	14.6	1,522	7.0	3,043	21.0	33	15.7	11,286	10.6	988	12.5	1,326	15.3	2,736	2.2
Applied psychology	4,768	1.6	744	3.3	34	4.4	277	1.3	562	3.9	4	1.9	2,294	2.2	168	2.1	138	1.6	547	0.4
Clinical psychology	3,270	1.1	651	2.9	11	1.4	248	1.1	224	1.5	2	1.0	1,654	1.6	143	1.8	154	1.8	183	0.1
Counseling psychology	2,910	0.9	285	1.3	12	1.6	142	0.7	815	5.6	8	3.8	1,061	1.0	114	1.4	357	4.1	116	0.1
Human development	759	0.2	79	0.4	3	0.4	35	0.2	93	0.6	0	0.0	334	0.3	40	0.5	8	0.1	167	0.1
Psychology, general	7,607	2.5	986	4.4	41	5.3	388	1.8	1,053	7.3	18	8.6	3,633	3.4	327	4.1	566	6.5	595	0.5

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2023

(Number and percent)

Detailed field	Total		U.S. citizens and permanent residents																	Temporary visa holders		
			Hispanic or Latino		Not Hispanic or Latino														Unknown ethnicity and race			
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race							
					Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent				Number
Research and experimental psychology	5,040	1.6	562	2.5	12	1.6	432	2.0	296	2.0	1	0.5	2,310	2.2	196	2.5	103	1.2	1,128	0.9		
Social sciences	32,991	10.7	2,618	11.7	175	22.6	1,695	7.8	2,249	15.5	35	16.7	11,341	10.7	898	11.4	1,202	13.9	12,778	10.2		
Agricultural and natural resource economics	304	0.1	10	*	0	0.0	10	*	7	*	0	0.0	66	0.1	3	*	2	*	206	0.2		
Anthropology	3,825	1.2	408	1.8	39	5.0	159	0.7	174	1.2	7	3.3	1,774	1.7	136	1.7	139	1.6	989	0.8		
Area, ethnic, cultural, gender, and group studies	2,338	0.8	383	1.7	70	9.1	146	0.7	332	2.3	3	1.4	653	0.6	103	1.3	90	1.0	558	0.4		
Criminal justice and safety studies	1,482	0.5	158	0.7	8	1.0	29	0.1	269	1.9	3	1.4	694	0.7	54	0.7	189	2.2	78	0.1		
Criminology	316	0.1	43	0.2	1	0.1	8	*	24	0.2	0	0.0	169	0.2	10	0.1	5	0.1	56	*		
Economics (except agricultural and natural resource)	8,161	2.7	215	1.0	3	0.4	459	2.1	114	0.8	1	0.5	1,668	1.6	89	1.1	146	1.7	5,466	4.4		
Geography and cartography	1,320	0.4	104	0.5	9	1.2	57	0.3	36	0.2	0	0.0	491	0.5	29	0.4	47	0.5	547	0.4		
International relations and national security studies	326	0.1	25	0.1	0	0.0	17	0.1	17	0.1	1	0.5	134	0.1	6	0.1	12	0.1	114	0.1		
Linguistics	1,610	0.5	87	0.4	12	1.6	93	0.4	37	0.3	1	0.5	555	0.5	43	0.5	36	0.4	746	0.6		
Political science and government	5,035	1.6	358	1.6	5	0.6	236	1.1	222	1.5	2	1.0	2,015	1.9	160	2.0	140	1.6	1,897	1.5		
Public policy analysis	2,725	0.9	210	0.9	14	1.8	159	0.7	468	3.2	6	2.9	915	0.9	83	1.1	223	2.6	647	0.5		
Sociology and population studies	4,516	1.5	553	2.5	11	1.4	263	1.2	468	3.2	6	2.9	1,779	1.7	163	2.1	126	1.5	1,147	0.9		
Urban studies and affairs	318	0.1	19	0.1	1	0.1	16	0.1	40	0.3	1	0.5	124	0.1	4	0.1	10	0.1	103	0.1		
Social sciences, other	715	0.2	45	0.2	2	0.3	43	0.2	41	0.3	4	1.9	304	0.3	15	0.2	37	0.4	224	0.2		
Engineering	74,992	24.4	3,400	15.2	83	10.7	5,136	23.8	1,836	12.7	30	14.3	18,549	17.5	1,437	18.2	1,470	17.0	43,051	34.4		
Aerospace, aeronautical, and astronautical engineering	2,884	0.9	190	0.9	6	0.8	238	1.1	64	0.4	2	1.0	1,161	1.1	96	1.2	48	0.6	1,079	0.9		
Biological, biomedical, and biosystems engineering	9,999	3.3	761	3.4	12	1.6	1,202	5.6	362	2.5	6	2.9	3,279	3.1	284	3.6	323	3.7	3,770	3.0		
Chemical, petroleum, and chemical-related engineering	7,888	2.6	355	1.6	8	1.0	643	3.0	157	1.1	3	1.4	2,123	2.0	138	1.8	122	1.4	4,339	3.5		
Chemical engineering	7,430	2.4	352	1.6	8	1.0	630	2.9	152	1.0	3	1.4	2,087	2.0	137	1.7	114	1.3	3,947	3.2		
Petroleum engineering	458	0.1	3	*	0	0.0	13	0.1	5	*	0	0.0	36	*	1	*	8	0.1	392	0.3		
Civil, environmental, transportation and related engineering fields	7,852	2.6	272	1.2	15	1.9	297	1.4	162	1.1	6	2.9	1,442	1.4	106	1.3	105	1.2	5,447	4.4		
Civil engineering	6,702	2.2	209	0.9	11	1.4	251	1.2	132	0.9	5	2.4	1,157	1.1	69	0.9	86	1.0	4,782	3.8		
Architectural, environmental, construction and surveying engineering	1,150	0.4	63	0.3	4	0.5	46	0.2	30	0.2	1	0.5	285	0.3	37	0.5	19	0.2	665	0.5		
Electrical, electronics, communications and computer engineering	17,706	5.8	507	2.3	6	0.8	1,082	5.0	311	2.1	5	2.4	2,953	2.8	240	3.0	306	3.5	12,296	9.8		
Electrical, electronics, and communications engineering	14,773	4.8	436	2.0	5	0.6	909	4.2	260	1.8	3	1.4	2,470	2.3	199	2.5	265	3.1	10,226	8.2		
Computer engineering	2,933	1.0	71	0.3	1	0.1	173	0.8	51	0.4	2	1.0	483	0.5	41	0.5	41	0.5	2,070	1.7		
Industrial, manufacturing, systems engineering and operations research	3,889	1.3	115	0.5	3	0.4	214	1.0	151	1.0	1	0.5	864	0.8	58	0.7	80	0.9	2,403	1.9		
Industrial and manufacturing engineering	2,292	0.7	68	0.3	2	0.3	81	0.4	83	0.6	0	0.0	389	0.4	15	0.2	32	0.4	1,622	1.3		
Systems engineering and operations research	1,597	0.5	47	0.2	1	0.1	133	0.6	68	0.5	1	0.5	475	0.4	43	0.5	48	0.6	781	0.6		
Mechanical engineering	11,679	3.8	551	2.5	12	1.6	656	3.0	221	1.5	2	1.0	2,858	2.7	223	2.8	204	2.4	6,952	5.6		

TABLE 4-4c

Citizenship, ethnicity, and race of doctoral students, by detailed field: 2023

(Number and percent)

Detailed field	U.S. citizens and permanent residents																			
	Total		Hispanic or Latino		Not Hispanic or Latino												Unknown ethnicity and race		Temporary visa holders	
					American Indian or Alaska Native		Asian		Black or African American		Native Hawaiian or Other Pacific Islander		White		More than one race					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Metallurgical, mining, materials and related engineering fields	4,782	1.6	302	1.4	6	0.8	345	1.6	107	0.7	1	0.5	1,420	1.3	116	1.5	71	0.8	2,414	1.9
Other engineering	8,313	2.7	347	1.6	15	1.9	459	2.1	301	2.1	4	1.9	2,449	2.3	176	2.2	211	2.4	4,351	3.5
Agricultural engineering	655	0.2	17	0.1	1	0.1	20	0.1	8	0.1	1	0.5	146	0.1	10	0.1	9	0.1	443	0.4
Engineering mechanics, physics, and science	1,694	0.6	75	0.3	3	0.4	137	0.6	39	0.3	1	0.5	471	0.4	42	0.5	29	0.3	897	0.7
Nuclear engineering	1,090	0.4	83	0.4	2	0.3	48	0.2	26	0.2	0	0.0	550	0.5	43	0.5	27	0.3	311	0.2
Engineering, other	4,874	1.6	172	0.8	9	1.2	254	1.2	228	1.6	2	1.0	1,282	1.2	81	1.0	146	1.7	2,700	2.2
Health	19,268	6.3	1,745	7.8	86	11.1	1,495	6.9	2,242	15.4	21	10.0	8,151	7.7	479	6.1	736	8.5	4,313	3.4
Clinical medicine	6,174	2.0	671	3.0	53	6.9	553	2.6	930	6.4	11	5.2	2,308	2.2	207	2.6	187	2.2	1,254	1.0
Medical clinical sciences and clinical and medical laboratory sciences	875	0.3	108	0.5	5	0.6	82	0.4	72	0.5	2	1.0	420	0.4	23	0.3	36	0.4	127	0.1
Public health	5,299	1.7	563	2.5	48	6.2	471	2.2	858	5.9	9	4.3	1,888	1.8	184	2.3	151	1.7	1,127	0.9
Other health	13,094	4.3	1,074	4.8	33	4.3	942	4.4	1,312	9.0	10	4.8	5,843	5.5	272	3.5	549	6.4	3,059	2.4
Communication disorders sciences	926	0.3	97	0.4	0	0.0	51	0.2	72	0.5	0	0.0	486	0.5	13	0.2	21	0.2	186	0.1
Dental sciences	811	0.3	190	0.9	1	0.1	123	0.6	25	0.2	0	0.0	234	0.2	6	0.1	80	0.9	152	0.1
Kinesiology and exercise science	968	0.3	70	0.3	2	0.3	32	0.1	50	0.3	0	0.0	514	0.5	22	0.3	22	0.3	256	0.2
Nursing science	3,809	1.2	270	1.2	16	2.1	243	1.1	535	3.7	5	2.4	2,044	1.9	79	1.0	139	1.6	478	0.4
Pharmaceutical sciences	2,954	1.0	133	0.6	3	0.4	248	1.1	152	1.0	0	0.0	706	0.7	57	0.7	92	1.1	1,563	1.3
Other health nec	3,626	1.2	314	1.4	11	1.4	245	1.1	478	3.3	5	2.4	1,859	1.7	95	1.2	195	2.3	424	0.3

* = value < 0.05%; ne = not eligible.

nec = not elsewhere classified.

Note(s):Percentages may not add to total because of rounding. Ethnicity and race data are available only for U.S. citizens and permanent residents. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-5

Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2023

(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
All detailed fields	14,304	683	11,137	674	7,473	415	8,176	330	6,418	257
Science	10,146	664	7,655	647	5,333	379	4,800	318	3,713	249
Agricultural and veterinary sciences	345	94	299	94	220	56	329	75	292	67
Agricultural sciences	307	91	273	91	195	56	228	60	204	52
Veterinary biomedical and clinical sciences	38	27	26	22	25	17	101	42	88	33
Biological and biomedical sciences	2,743	507	1,682	487	1,863	290	1,798	267	1,340	205
Biochemistry	177	147	81	76	151	128	143	112	120	89
Biology	399	355	352	327	161	151	214	173	144	114
Biomedical sciences	189	142	124	97	110	93	80	59	55	41
Biophysics	40	34	4	4	40	34	16	14	10	9
Biostatistics and bioinformatics	204	122	146	103	128	84	89	62	84	55
Biotechnology	91	80	84	74	10	9	20	17	18	15
Botany and plant biology	61	45	55	43	54	39	47	32	33	25
Cell, cellular biology, and anatomical sciences	182	123	83	69	149	105	116	86	93	67
Ecology and population biology	107	88	72	59	79	66	64	51	47	40
Epidemiology	106	82	78	65	70	64	54	48	34	31
Genetics	100	71	48	40	75	60	103	67	76	49
Microbiological sciences and immunology	179	127	86	77	147	110	160	106	118	72
Molecular biology	48	45	19	19	35	32	41	37	27	22
Neurobiology and neuroscience	179	135	48	46	164	128	138	88	97	67
Nutrition science	121	98	103	88	61	56	44	32	24	22
Pathology and experimental pathology	45	41	14	14	36	34	70	48	48	41
Pharmacology and toxicology	141	100	60	55	124	91	93	76	68	58
Physiology	209	148	121	102	147	104	155	92	109	66
Zoology and animal biology	68	46	58	44	58	41	48	35	40	28
Biological and biomedical sciences nec	97	68	46	39	64	48	103	47	95	41
Computer and information sciences	1,115	431	1,017	427	319	196	201	132	198	97
Artificial intelligence, informatics, and computer and information science topics	98	69	88	64	25	21	27	20	25	19
Computer and information sciences	221	168	182	162	94	73	55	50	49	29
Computer and information systems security	178	136	173	135	11	10	4	4	5	5
Computer science	296	245	272	234	137	117	78	73	65	53
Information science and studies	132	96	121	91	32	29	16	14	17	13
Information technology	100	82	95	80	12	10	2	2	6	4
Computer and information sciences nec	90	64	86	62	8	7	19	16	31	25

TABLE 4-5

Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2023

(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
Geosciences, atmospheric, and ocean sciences	382	224	322	205	265	156	262	137	256	120
Atmospheric sciences and meteorology	49	46	39	37	43	41	38	28	41	29
Geological and earth sciences	254	197	219	179	164	134	148	116	136	93
Ocean and marine sciences	79	60	64	54	58	46	56	38	57	37
Geosciences, atmospheric, and ocean sciences nec	ne	ne	ne	ne	ne	ne	20	8	22	9
Mathematics and statistics	746	350	648	340	338	195	211	137	89	58
Applied mathematics	215	166	181	145	75	69	39	37	20	18
Mathematics	318	286	274	255	167	160	119	109	45	40
Statistics	213	169	193	163	96	87	53	50	24	20
Multidisciplinary and interdisciplinary sciences	493	257	405	235	159	113	211	96	197	91
Biological and physical sciences	43	35	34	27	17	16	11	10	12	11
Computational science	57	47	50	41	14	14	10	8	10	10
Data science and data analytics	102	91	99	89	10	9	30	22	19	16
International and global studies	33	30	31	28	6	5	11	11	9	6
Multidisciplinary and interdisciplinary sciences nec	258	160	191	133	112	85	149	76	147	68
Natural resources and conservation	377	213	329	202	160	105	177	102	140	76
Environmental science and studies	213	164	181	149	76	63	71	59	53	41
Forestry, natural resources, and conservation	164	90	148	89	84	55	106	60	87	50
Physical sciences	786	327	559	303	556	227	578	228	451	180
Astronomy and astrophysics	60	52	17	17	53	47	73	51	63	38
Chemistry	350	304	275	255	229	204	227	199	163	139
Materials sciences	62	50	38	33	48	41	25	21	29	20
Physics	286	234	209	192	212	188	234	180	171	126
Physical sciences nec	28	25	20	18	14	14	19	19	25	18
Psychology	1,145	469	809	419	509	242	263	141	217	119
Applied psychology	412	284	345	251	144	116	44	36	32	22
Clinical psychology	119	106	57	49	67	65	17	14	9	7
Counseling psychology	117	110	86	82	44	44	7	7	4	4
Human development	68	62	55	55	28	26	43	34	51	29
Psychology, general	245	226	187	175	94	90	111	100	92	79
Research and experimental psychology	184	127	79	61	132	98	41	35	29	26
Social sciences	2,014	409	1,585	395	944	210	770	164	533	134
Agricultural and natural resource economics	32	27	28	26	11	10	31	30	21	21
Anthropology	171	153	122	116	108	103	81	74	35	24

TABLE 4-5

Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2023

(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral					
	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions	Units	Institutions
Area, ethnic, cultural, gender, and group studies	302	137	236	125	123	67	156	59	57	22
Criminal justice and safety studies	117	108	115	108	21	21	12	11	9	9
Criminology	48	45	44	42	16	16	4	4	4	4
Economics (except agricultural and natural resource)	284	201	220	174	165	133	63	50	42	35
Geography and cartography	146	122	141	119	54	52	48	44	27	23
International relations and national security studies	103	81	100	79	12	12	19	15	26	15
Linguistics	105	92	81	74	63	57	26	24	21	20
Political science and government	206	192	153	148	126	123	64	53	35	31
Public policy analysis	137	106	104	88	56	48	77	53	86	52
Sociology and population studies	217	198	136	132	129	121	84	64	59	44
Urban studies and affairs	40	30	33	25	13	13	4	4	9	8
Social sciences, other	106	83	72	61	47	42	101	58	102	44
Engineering	2,562	332	2,254	326	1,460	235	1,200	218	953	179
Aerospace, aeronautical, and astronautical engineering	75	66	74	66	52	50	45	41	35	31
Biological, biomedical, and biosystems engineering	244	183	206	166	170	146	156	124	126	87
Chemical, petroleum, and chemical-related engineering	195	150	173	141	149	126	144	116	97	74
Chemical engineering	173	148	153	138	134	126	131	115	88	73
Petroleum engineering	22	20	20	20	15	15	13	9	9	7
Civil, environmental, transportation and related engineering fields	385	210	347	206	209	143	194	126	152	93
Civil engineering	250	198	229	194	148	137	168	119	131	86
Architectural, environmental, construction and surveying engineering	135	101	118	94	61	51	26	22	21	19
Electrical, electronics, communications and computer engineering	482	261	442	255	244	177	173	139	152	111
Electrical, electronics, and communications engineering	302	234	274	228	177	167	154	134	138	104
Computer engineering	180	134	168	130	67	63	19	16	14	12
Industrial, manufacturing, systems engineering and operations research	244	150	226	143	106	89	59	51	46	32
Industrial and manufacturing engineering	131	106	127	105	63	61	45	39	29	21
Systems engineering and operations research	113	78	99	71	43	36	14	12	17	14
Mechanical engineering	310	238	287	233	179	165	167	140	111	92
Metallurgical, mining, materials and related engineering fields	151	101	125	91	109	83	84	60	58	42
Other engineering	476	203	374	182	242	128	178	91	176	84
Agricultural engineering	36	28	31	28	29	24	22	22	15	14
Engineering mechanics, physics, and science	68	51	45	38	46	37	26	22	25	16
Nuclear engineering	28	27	27	27	25	25	11	10	10	9
Engineering, other	344	174	271	153	142	90	119	69	126	72

TABLE 4-5

Units and institutions with graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers, by detailed field: 2023

(Number)

Detailed field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Units	Institutions	Units	Institutions
	Units	Institutions	Units	Institutions	Units	Institutions				
Health	1,596	454	1,228	436	680	232	2,176	182	1,752	147
Clinical medicine	594	274	506	267	215	115	1,746	137	1,392	112
Medical clinical sciences and clinical and medical laboratory sciences	83	59	62	48	33	29	54	30	70	25
Public health	511	261	444	255	182	102	184	101	182	84
Anesthesiology	ne	ne	ne	ne	ne	ne	50	43	34	29
Cardiology and cardiovascular disease	ne	ne	ne	ne	ne	ne	55	34	35	25
Endocrinology, diabetes, and metabolism	ne	ne	ne	ne	ne	ne	44	33	29	25
Gastroenterology	ne	ne	ne	ne	ne	ne	40	32	23	20
Hematology	ne	ne	ne	ne	ne	ne	28	22	24	19
Neurology and neurosurgery	ne	ne	ne	ne	ne	ne	128	61	87	47
Obstetrics and gynecology	ne	ne	ne	ne	ne	ne	49	30	40	31
Oncology and cancer research	ne	ne	ne	ne	ne	ne	119	50	85	33
Ophthalmology	ne	ne	ne	ne	ne	ne	67	52	45	38
Otorhinolaryngology	ne	ne	ne	ne	ne	ne	34	33	28	27
Pediatrics	ne	ne	ne	ne	ne	ne	121	54	103	48
Psychiatry	ne	ne	ne	ne	ne	ne	83	54	56	44
Pulmonary disease	ne	ne	ne	ne	ne	ne	38	34	28	26
Radiological sciences	ne	ne	ne	ne	ne	ne	109	53	81	39
Surgery	ne	ne	ne	ne	ne	ne	180	59	141	48
Clinical medicine nec	ne	ne	ne	ne	ne	ne	363	76	301	61
Other health	1,002	403	722	373	465	207	430	141	360	109
Communication disorders sciences	270	243	250	238	74	64	32	31	36	35
Dental sciences	89	46	79	44	20	18	66	36	45	28
Kinesiology and exercise science	164	150	149	140	43	41	30	28	15	14
Nursing science	146	137	26	25	133	127	60	48	61	40
Pharmaceutical sciences	127	85	89	69	93	66	107	70	88	55
Other health nec	206	145	129	109	102	77	135	67	115	53

ne = not eligible.

nec = not elsewhere classified.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Unit counts do not sum across columns. For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-6a

Agricultural and veterinary sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	94	13.7	94	13.7	56	8.2
Schools	94	12.2	94	12.2	56	7.3
Units	345	1.5	299	1.3	220	1.0
All graduate students	11,755	100.0	6,901	100.0	4,854	100.0
Male	4,744	40.4	2,553	37.0	2,191	45.1
Female	7,011	59.6	4,348	63.0	2,663	54.9
U.S. citizens and permanent residents ^a	7,684	65.4	5,291	76.7	2,393	49.3
Hispanic or Latino	896	7.6	653	9.5	243	5.0
Not Hispanic or Latino						
American Indian or Alaska Native	41	0.3	27	0.4	14	0.3
Asian	372	3.2	236	3.4	136	2.8
Black or African American	422	3.6	323	4.7	99	2.0
Native Hawaiian or Other Pacific Islander	17	0.1	16	0.2	1	*
White	5,457	46.4	3,702	53.6	1,755	36.2
More than one race	244	2.1	169	2.4	75	1.5
Unknown ethnicity and race	235	2.0	165	2.4	70	1.4
Temporary visa holders	4,071	34.6	1,610	23.3	2,461	50.7
Part time	3,436	29.2	2,715	39.3	721	14.9
Full time	8,319	70.8	4,186	60.7	4,133	85.1
First time	2,240	19.1	1,612	23.4	628	12.9
Primary source of support for full-time students ^b						
Federal	1,967	16.7	734	10.6	1,233	25.4
DOD	28	0.2	2	*	26	0.5
DOE	48	0.4	10	0.1	38	0.8
HHS	236	2.0	51	0.7	185	3.8
NIH	120	1.0	14	0.2	106	2.2
Other HHS	116	1.0	37	0.5	79	1.6
NASA	8	0.1	3	*	5	0.1
NSF	141	1.2	37	0.5	104	2.1
USDA	1,206	10.3	496	7.2	710	14.6
Other	300	2.6	135	2.0	165	3.4
Nonfederal	4,897	41.7	2,257	32.7	2,640	54.4
Institutional	4,028	34.3	1,844	26.7	2,184	45.0
Domestic	829	7.1	400	5.8	429	8.8
Foreign	40	0.3	13	0.2	27	0.6

TABLE 4-6a

Agricultural and veterinary sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	1,455	12.4	1,195	17.3	260	5.4
Primary mechanism of support for full-time students ^b						
Fellowships	409	3.5	104	1.5	305	6.3
Research assistantships	4,841	41.2	2,022	29.3	2,819	58.1
Teaching assistantships	979	8.3	445	6.4	534	11.0
Traineeships	19	0.2	3	*	16	0.3
Other types of support	2,071	17.6	1,612	23.4	459	9.5
Self-support	1,455	12.4	1,195	17.3	260	5.4
Other	616	5.2	417	6.0	199	4.1

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-6b

Agricultural and veterinary sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	75	10.9	67	9.8
Schools	75	9.7	67	8.7
Units	329	1.4	292	1.3
All individuals	1,993	100.0	1,238	100.0
Male	1,019	51.1	625	50.5
Female	974	48.9	613	49.5
U.S. citizens and permanent residents ^a	825	41.4	na	na
Hispanic or Latino	55	2.8	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	2	0.1	na	na
Asian	126	6.3	na	na
Black or African American	60	3.0	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	489	24.5	na	na
More than one race	22	1.1	na	na
Unknown ethnicity and race	70	3.5	na	na
Temporary visa holders	1,168	58.6	na	na
Primary source of support				
Federal	853	42.8	na	na
Nonfederal ^b	975	48.9	na	na
Personal resources	4	0.2	na	na
Unknown or not stated	161	8.1	na	na
Primary mechanism of support				
Fellowships	149	7.5	na	na
Research grants	1,205	60.5	na	na
Traineeships	117	5.9	na	na
Other types of support	522	26.2	na	na
Degree type ^c				
Doctoral degree	1,226	61.5	796	64.3
Professional degree	262	13.1	106	8.6
Dual degree	19	1.0	10	0.8
Doctoral degree type unknown	486	24.4	326	26.3
Degree origin				
United States	687	34.5	na	na
Foreign country	439	22.0	na	na

TABLE 4-6b

Agricultural and veterinary sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	867	43.5	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-7a

Biological and biomedical sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	507	73.8	487	70.9	290	42.2
Schools	560	72.7	534	69.4	333	43.2
Units	2,743	12.0	1,682	7.4	1,863	8.2
All graduate students	105,566	100.0	44,703	100.0	60,863	100.0
Male	39,431	37.4	14,555	32.6	24,876	40.9
Female	66,135	62.6	30,148	67.4	35,987	59.1
U.S. citizens and permanent residents ^a	79,320	75.1	35,639	79.7	43,681	71.8
Hispanic or Latino	11,037	10.5	5,086	11.4	5,951	9.8
Not Hispanic or Latino						
American Indian or Alaska Native	284	0.3	125	0.3	159	0.3
Asian	10,603	10.0	4,966	11.1	5,637	9.3
Black or African American	6,510	6.2	3,905	8.7	2,605	4.3
Native Hawaiian or Other Pacific Islander	112	0.1	61	0.1	51	0.1
White	44,088	41.8	18,362	41.1	25,726	42.3
More than one race	3,444	3.3	1,525	3.4	1,919	3.2
Unknown ethnicity and race	3,242	3.1	1,609	3.6	1,633	2.7
Temporary visa holders	26,246	24.9	9,064	20.3	17,182	28.2
Part time	19,413	18.4	15,523	34.7	3,890	6.4
Full time	86,153	81.6	29,180	65.3	56,973	93.6
First time	25,552	24.2	15,106	33.8	10,446	17.2
Primary source of support for full-time students ^b						
Federal	21,445	20.3	1,928	4.3	19,517	32.1
DOD	462	0.4	93	0.2	369	0.6
DOE	211	0.2	26	0.1	185	0.3
HHS	15,459	14.6	543	1.2	14,916	24.5
NIH	14,648	13.9	453	1.0	14,195	23.3
Other HHS	811	0.8	90	0.2	721	1.2
NASA	76	0.1	8	*	68	0.1
NSF	2,377	2.3	236	0.5	2,141	3.5
USDA	878	0.8	243	0.5	635	1.0
Other	1,982	1.9	779	1.7	1,203	2.0
Nonfederal	43,941	41.6	8,571	19.2	35,370	58.1
Institutional	39,510	37.4	7,549	16.9	31,961	52.5
Domestic	4,076	3.9	932	2.1	3,144	5.2
Foreign	355	0.3	90	0.2	265	0.4

TABLE 4-7a

Biological and biomedical sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	20,767	19.7	18,681	41.8	2,086	3.4
Primary mechanism of support for full-time students ^b						
Fellowships	11,079	10.5	567	1.3	10,512	17.3
Research assistantships	29,416	27.9	2,885	6.5	26,531	43.6
Teaching assistantships	10,499	9.9	2,967	6.6	7,532	12.4
Traineeships	5,981	5.7	163	0.4	5,818	9.6
Other types of support	29,178	27.6	22,598	50.6	6,580	10.8
Self-support	20,767	19.7	18,681	41.8	2,086	3.4
Other	8,411	8.0	3,917	8.8	4,494	7.4

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-7b

Biological and biomedical sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	267	38.9	205	29.8
Schools	317	41.2	238	30.9
Units	1,798	7.9	1,340	5.9
All individuals	19,520	100.0	8,589	100.0
Male	10,242	52.5	4,520	52.6
Female	9,278	47.5	4,069	47.4
U.S. citizens and permanent residents ^a	8,098	41.5	na	na
Hispanic or Latino	776	4.0	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	30	0.2	na	na
Asian	1,587	8.1	na	na
Black or African American	301	1.5	na	na
Native Hawaiian or Other Pacific Islander	13	0.1	na	na
White	4,448	22.8	na	na
More than one race	219	1.1	na	na
Unknown ethnicity and race	724	3.7	na	na
Temporary visa holders	11,422	58.5	na	na
Primary source of support				
Federal	10,520	53.9	na	na
Nonfederal ^b	6,856	35.1	na	na
Personal resources	119	0.6	na	na
Unknown or not stated	2,025	10.4	na	na
Primary mechanism of support				
Fellowships	1,602	8.2	na	na
Research grants	12,644	64.8	na	na
Traineeships	926	4.7	na	na
Other types of support	4,348	22.3	na	na
Degree type ^c				
Doctoral degree	15,120	77.5	6,221	72.4
Professional degree	712	3.6	588	6.8
Dual degree	317	1.6	152	1.8
Doctoral degree type unknown	3,371	17.3	1,628	19.0
Degree origin				
United States	6,864	35.2	na	na
Foreign country	7,613	39.0	na	na

TABLE 4-7b

Biological and biomedical sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	5,043	25.8	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-8a

Computer and information sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	431	62.7	427	62.2	196	28.5
Schools	442	57.4	437	56.8	200	26.0
Units	1,115	4.9	1,017	4.5	319	1.4
All graduate students	166,014	100.0	143,530	100.0	22,484	100.0
Male	111,028	66.9	94,928	66.1	16,100	71.6
Female	54,986	33.1	48,602	33.9	6,384	28.4
U.S. citizens and permanent residents ^a	57,659	34.7	49,046	34.2	8,613	38.3
Hispanic or Latino	6,059	3.6	5,425	3.8	634	2.8
Not Hispanic or Latino						
American Indian or Alaska Native	168	0.1	141	0.1	27	0.1
Asian	14,432	8.7	12,577	8.8	1,855	8.3
Black or African American	6,351	3.8	5,529	3.9	822	3.7
Native Hawaiian or Other Pacific Islander	87	0.1	75	0.1	12	0.1
White	24,437	14.7	20,179	14.1	4,258	18.9
More than one race	2,166	1.3	1,784	1.2	382	1.7
Unknown ethnicity and race	3,959	2.4	3,336	2.3	623	2.8
Temporary visa holders	108,355	65.3	94,484	65.8	13,871	61.7
Part time	52,381	31.6	49,013	34.1	3,368	15.0
Full time	113,633	68.4	94,517	65.9	19,116	85.0
First time	47,543	28.6	43,890	30.6	3,653	16.2
Primary source of support for full-time students ^b						
Federal	6,387	3.8	1,855	1.3	4,532	20.2
DOD	1,240	0.7	405	0.3	835	3.7
DOE	195	0.1	51	*	144	0.6
HHS	583	0.4	158	0.1	425	1.9
NIH	434	0.3	113	0.1	321	1.4
Other HHS	149	0.1	45	*	104	0.5
NASA	95	0.1	49	*	46	0.2
NSF	2,989	1.8	432	0.3	2,557	11.4
USDA	99	0.1	48	*	51	0.2
Other	1,186	0.7	712	0.5	474	2.1
Nonfederal	31,186	18.8	18,458	12.9	12,728	56.6
Institutional	28,332	17.1	16,983	11.8	11,349	50.5
Domestic	2,388	1.4	1,260	0.9	1,128	5.0
Foreign	466	0.3	215	0.1	251	1.1

TABLE 4-8a

Computer and information sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	76,060	45.8	74,204	51.7	1,856	8.3
Primary mechanism of support for full-time students ^b						
Fellowships	3,572	2.2	1,078	0.8	2,494	11.1
Research assistantships	11,313	6.8	2,926	2.0	8,387	37.3
Teaching assistantships	9,443	5.7	4,597	3.2	4,846	21.6
Traineeships	551	0.3	255	0.2	296	1.3
Other types of support	88,754	53.5	85,661	59.7	3,093	13.8
Self-support	76,060	45.8	74,204	51.7	1,856	8.3
Other	12,694	7.6	11,457	8.0	1,237	5.5

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-8b

Computer and information sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	132	19.2	97	14.1
Schools	135	17.5	100	13.0
Units	201	0.9	198	0.9
All individuals	987	100.0	631	100.0
Male	712	72.1	458	72.6
Female	275	27.9	173	27.4
U.S. citizens and permanent residents ^a	374	37.9	na	na
Hispanic or Latino	19	1.9	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	81	8.2	na	na
Black or African American	18	1.8	na	na
Native Hawaiian or Other Pacific Islander	2	0.2	na	na
White	198	20.1	na	na
More than one race	6	0.6	na	na
Unknown ethnicity and race	49	5.0	na	na
Temporary visa holders	613	62.1	na	na
Primary source of support				
Federal	437	44.3	na	na
Nonfederal ^b	474	48.0	na	na
Personal resources	15	1.5	na	na
Unknown or not stated	61	6.2	na	na
Primary mechanism of support				
Fellowships	82	8.3	na	na
Research grants	673	68.2	na	na
Traineeships	21	2.1	na	na
Other types of support	211	21.4	na	na
Degree type ^c				
Doctoral degree	700	70.9	462	73.2
Professional degree	36	3.6	12	1.9
Dual degree	5	0.5	1	0.2
Doctoral degree type unknown	246	24.9	156	24.7
Degree origin				
United States	405	41.0	na	na
Foreign country	242	24.5	na	na

TABLE 4-8b

Computer and information sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	340	34.4	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-9a

Geosciences, atmospheric, and ocean sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	224	32.6	205	29.8	156	22.7
Schools	228	29.6	208	27.0	158	20.5
Units	382	1.7	322	1.4	265	1.2
All graduate students	11,594	100.0	4,793	100.0	6,801	100.0
Male	5,522	47.6	2,180	45.5	3,342	49.1
Female	6,072	52.4	2,613	54.5	3,459	50.9
U.S. citizens and permanent residents ^a	8,851	76.3	4,209	87.8	4,642	68.3
Hispanic or Latino	1,132	9.8	582	12.1	550	8.1
Not Hispanic or Latino						
American Indian or Alaska Native	29	0.3	19	0.4	10	0.1
Asian	415	3.6	159	3.3	256	3.8
Black or African American	311	2.7	143	3.0	168	2.5
Native Hawaiian or Other Pacific Islander	5	*	3	0.1	2	*
White	6,201	53.5	2,985	62.3	3,216	47.3
More than one race	454	3.9	189	3.9	265	3.9
Unknown ethnicity and race	304	2.6	129	2.7	175	2.6
Temporary visa holders	2,743	23.7	584	12.2	2,159	31.7
Part time	2,075	17.9	1,417	29.6	658	9.7
Full time	9,519	82.1	3,376	70.4	6,143	90.3
First time	2,483	21.4	1,443	30.1	1,040	15.3
Primary source of support for full-time students ^b						
Federal	2,607	22.5	590	12.3	2,017	29.7
DOD	148	1.3	43	0.9	105	1.5
DOE	118	1.0	24	0.5	94	1.4
HHS	26	0.2	5	0.1	21	0.3
NIH	16	0.1	0	0.0	16	0.2
Other HHS	10	0.1	5	0.1	5	0.1
NASA	431	3.7	54	1.1	377	5.5
NSF	1,214	10.5	237	4.9	977	14.4
USDA	33	0.3	7	0.1	26	0.4
Other	637	5.5	220	4.6	417	6.1
Nonfederal	5,756	49.6	1,933	40.3	3,823	56.2
Institutional	5,199	44.8	1,773	37.0	3,426	50.4
Domestic	458	4.0	137	2.9	321	4.7
Foreign	99	0.9	23	0.5	76	1.1

TABLE 4-9a

Geosciences, atmospheric, and ocean sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	1,156	10.0	853	17.8	303	4.5
Primary mechanism of support for full-time students ^b						
Fellowships	1,060	9.1	108	2.3	952	14.0
Research assistantships	4,334	37.4	1,149	24.0	3,185	46.8
Teaching assistantships	2,339	20.2	1,026	21.4	1,313	19.3
Traineeships	87	0.8	8	0.2	79	1.2
Other types of support	1,699	14.7	1,085	22.6	614	9.0
Self-support	1,156	10.0	853	17.8	303	4.5
Other	543	4.7	232	4.8	311	4.6

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-9b

Geosciences, atmospheric, and ocean sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	137	19.9	120	17.5
Schools	137	17.8	120	15.6
Units	262	1.1	256	1.1
All individuals	1,919	100.0	2,455	100.0
Male	1,120	58.4	1,604	65.3
Female	799	41.6	851	34.7
U.S. citizens and permanent residents ^a	931	48.5	na	na
Hispanic or Latino	79	4.1	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	3	0.2	na	na
Asian	105	5.5	na	na
Black or African American	30	1.6	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	582	30.3	na	na
More than one race	31	1.6	na	na
Unknown ethnicity and race	100	5.2	na	na
Temporary visa holders	988	51.5	na	na
Primary source of support				
Federal	928	48.4	na	na
Nonfederal ^b	750	39.1	na	na
Personal resources	85	4.4	na	na
Unknown or not stated	156	8.1	na	na
Primary mechanism of support				
Fellowships	191	10.0	na	na
Research grants	1,313	68.4	na	na
Traineeships	36	1.9	na	na
Other types of support	379	19.7	na	na
Degree type ^c				
Doctoral degree	1,600	83.4	1,891	77.0
Professional degree	21	1.1	97	4.0
Dual degree	6	0.3	2	0.1
Doctoral degree type unknown	292	15.2	465	18.9
Degree origin				
United States	917	47.8	na	na
Foreign country	420	21.9	na	na

TABLE 4-9b

Geosciences, atmospheric, and ocean sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	582	30.3	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-10a

Mathematics and statistics master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	350	50.9	340	49.5	195	28.4
Schools	360	46.8	348	45.2	199	25.8
Units	746	3.3	648	2.8	338	1.5
All graduate students	33,893	100.0	20,105	100.0	13,788	100.0
Male	21,942	64.7	12,285	61.1	9,657	70.0
Female	11,951	35.3	7,820	38.9	4,131	30.0
U.S. citizens and permanent residents ^a	15,831	46.7	9,086	45.2	6,745	48.9
Hispanic or Latino	1,958	5.8	1,250	6.2	708	5.1
Not Hispanic or Latino						
American Indian or Alaska Native	38	0.1	27	0.1	11	0.1
Asian	2,563	7.6	1,553	7.7	1,010	7.3
Black or African American	768	2.3	548	2.7	220	1.6
Native Hawaiian or Other Pacific Islander	15	*	11	0.1	4	*
White	9,075	26.8	4,917	24.5	4,158	30.2
More than one race	595	1.8	321	1.6	274	2.0
Unknown ethnicity and race	819	2.4	459	2.3	360	2.6
Temporary visa holders	18,062	53.3	11,019	54.8	7,043	51.1
Part time	7,061	20.8	5,868	29.2	1,193	8.7
Full time	26,832	79.2	14,237	70.8	12,595	91.3
First time	9,842	29.0	7,311	36.4	2,531	18.4
Primary source of support for full-time students ^b						
Federal	1,633	4.8	217	1.1	1,416	10.3
DOD	137	0.4	36	0.2	101	0.7
DOE	35	0.1	1	*	34	0.2
HHS	245	0.7	38	0.2	207	1.5
NIH	202	0.6	34	0.2	168	1.2
Other HHS	43	0.1	4	*	39	0.3
NASA	20	0.1	5	*	15	0.1
NSF	996	2.9	60	0.3	936	6.8
USDA	16	*	2	*	14	0.1
Other	184	0.5	75	0.4	109	0.8
Nonfederal	14,391	42.5	3,920	19.5	10,471	75.9
Institutional	13,820	40.8	3,731	18.6	10,089	73.2
Domestic	448	1.3	161	0.8	287	2.1
Foreign	123	0.4	28	0.1	95	0.7

TABLE 4-10a

Mathematics and statistics master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	10,808	31.9	10,100	50.2	708	5.1
Primary mechanism of support for full-time students ^b						
Fellowships	2,036	6.0	269	1.3	1,767	12.8
Research assistantships	2,762	8.1	453	2.3	2,309	16.7
Teaching assistantships	8,923	26.3	1,809	9.0	7,114	51.6
Traineeships	173	0.5	37	0.2	136	1.0
Other types of support	12,938	38.2	11,669	58.0	1,269	9.2
Self-support	10,808	31.9	10,100	50.2	708	5.1
Other	2,130	6.3	1,569	7.8	561	4.1

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-10b

Mathematics and statistics postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	137	19.9	58	8.4
Schools	139	18.1	59	7.7
Units	211	0.9	89	0.4
All individuals	1,220	100.0	307	100.0
Male	934	76.6	214	69.7
Female	286	23.4	93	30.3
U.S. citizens and permanent residents ^a	604	49.5	na	na
Hispanic or Latino	45	3.7	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	5	0.4	na	na
Asian	123	10.1	na	na
Black or African American	13	1.1	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	319	26.1	na	na
More than one race	20	1.6	na	na
Unknown ethnicity and race	78	6.4	na	na
Temporary visa holders	616	50.5	na	na
Primary source of support				
Federal	306	25.1	na	na
Nonfederal ^b	788	64.6	na	na
Personal resources	11	0.9	na	na
Unknown or not stated	115	9.4	na	na
Primary mechanism of support				
Fellowships	150	12.3	na	na
Research grants	455	37.3	na	na
Traineeships	93	7.6	na	na
Other types of support	522	42.8	na	na
Degree type ^c				
Doctoral degree	972	79.7	263	85.7
Professional degree	22	1.8	25	8.1
Dual degree	4	0.3	1	0.3
Doctoral degree type unknown	222	18.2	18	5.9
Degree origin				
United States	585	48.0	na	na
Foreign country	211	17.3	na	na

TABLE 4-10b

Mathematics and statistics postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	424	34.8	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-11a

Multidisciplinary and interdisciplinary sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	257	37.4	235	34.2	113	16.4
Schools	268	34.8	242	31.4	118	15.3
Units	493	2.2	405	1.8	159	0.7
All graduate students	26,429	100.0	21,928	100.0	4,501	100.0
Male	13,384	50.6	11,369	51.8	2,015	44.8
Female	13,045	49.4	10,559	48.2	2,486	55.2
U.S. citizens and permanent residents ^a	14,972	56.6	12,064	55.0	2,908	64.6
Hispanic or Latino	1,935	7.3	1,596	7.3	339	7.5
Not Hispanic or Latino						
American Indian or Alaska Native	43	0.2	33	0.2	10	0.2
Asian	2,392	9.1	2,071	9.4	321	7.1
Black or African American	1,458	5.5	1,206	5.5	252	5.6
Native Hawaiian or Other Pacific Islander	25	0.1	20	0.1	5	0.1
White	7,814	29.6	6,085	27.7	1,729	38.4
More than one race	574	2.2	448	2.0	126	2.8
Unknown ethnicity and race	731	2.8	605	2.8	126	2.8
Temporary visa holders	11,457	43.4	9,864	45.0	1,593	35.4
Part time	9,242	35.0	8,515	38.8	727	16.2
Full time	17,187	65.0	13,413	61.2	3,774	83.8
First time	7,733	29.3	6,928	31.6	805	17.9
Primary source of support for full-time students ^b						
Federal	1,002	3.8	474	2.2	528	11.7
DOD	53	0.2	34	0.2	19	0.4
DOE	49	0.2	2	*	47	1.0
HHS	222	0.8	22	0.1	200	4.4
NIH	208	0.8	19	0.1	189	4.2
Other HHS	14	0.1	3	*	11	0.2
NASA	25	0.1	5	*	20	0.4
NSF	201	0.8	52	0.2	149	3.3
USDA	17	0.1	4	*	13	0.3
Other	435	1.6	355	1.6	80	1.8
Nonfederal	5,865	22.2	3,157	14.4	2,708	60.2
Institutional	5,438	20.6	2,910	13.3	2,528	56.2
Domestic	363	1.4	209	1.0	154	3.4
Foreign	64	0.2	38	0.2	26	0.6

TABLE 4-11a

Multidisciplinary and interdisciplinary sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	10,320	39.0	9,782	44.6	538	12.0
Primary mechanism of support for full-time students ^b						
Fellowships	1,662	6.3	773	3.5	889	19.8
Research assistantships	1,570	5.9	484	2.2	1,086	24.1
Teaching assistantships	1,336	5.1	555	2.5	781	17.4
Traineeships	125	0.5	40	0.2	85	1.9
Other types of support	12,494	47.3	11,561	52.7	933	20.7
Self-support	10,320	39.0	9,782	44.6	538	12.0
Other	2,174	8.2	1,779	8.1	395	8.8

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-11b

Multidisciplinary and interdisciplinary sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	96	14.0	91	13.2
Schools	96	12.5	91	11.8
Units	211	0.9	197	0.9
All individuals	988	100.0	818	100.0
Male	552	55.9	497	60.8
Female	436	44.1	321	39.2
U.S. citizens and permanent residents ^a	490	49.6	na	na
Hispanic or Latino	48	4.9	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	81	8.2	na	na
Black or African American	21	2.1	na	na
Native Hawaiian or Other Pacific Islander	4	0.4	na	na
White	260	26.3	na	na
More than one race	14	1.4	na	na
Unknown ethnicity and race	61	6.2	na	na
Temporary visa holders	498	50.4	na	na
Primary source of support				
Federal	416	42.1	na	na
Nonfederal ^b	440	44.5	na	na
Personal resources	13	1.3	na	na
Unknown or not stated	119	12.0	na	na
Primary mechanism of support				
Fellowships	102	10.3	na	na
Research grants	594	60.1	na	na
Traineeships	38	3.8	na	na
Other types of support	254	25.7	na	na
Degree type ^c				
Doctoral degree	722	73.1	658	80.4
Professional degree	24	2.4	22	2.7
Dual degree	4	0.4	1	0.1
Doctoral degree type unknown	238	24.1	137	16.7
Degree origin				
United States	454	46.0	na	na
Foreign country	224	22.7	na	na

TABLE 4-11b

Multidisciplinary and interdisciplinary sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	310	31.4	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-12a

Natural resources and conservation master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	213	31.0	202	29.4	105	15.3
Schools	217	28.2	205	26.6	107	13.9
Units	377	1.7	329	1.4	160	0.7
All graduate students	13,490	100.0	9,486	100.0	4,004	100.0
Male	5,443	40.3	3,758	39.6	1,685	42.1
Female	8,047	59.7	5,728	60.4	2,319	57.9
U.S. citizens and permanent residents ^a	11,139	82.6	8,309	87.6	2,830	70.7
Hispanic or Latino	1,240	9.2	953	10.0	287	7.2
Not Hispanic or Latino						
American Indian or Alaska Native	120	0.9	76	0.8	44	1.1
Asian	448	3.3	295	3.1	153	3.8
Black or African American	464	3.4	306	3.2	158	3.9
Native Hawaiian or Other Pacific Islander	26	0.2	23	0.2	3	0.1
White	8,051	59.7	6,091	64.2	1,960	49.0
More than one race	449	3.3	350	3.7	99	2.5
Unknown ethnicity and race	341	2.5	215	2.3	126	3.1
Temporary visa holders	2,351	17.4	1,177	12.4	1,174	29.3
Part time	4,462	33.1	3,722	39.2	740	18.5
Full time	9,028	66.9	5,764	60.8	3,264	81.5
First time	2,964	22.0	2,436	25.7	528	13.2
Primary source of support for full-time students ^b						
Federal	1,519	11.3	760	8.0	759	19.0
DOD	46	0.3	28	0.3	18	0.4
DOE	66	0.5	24	0.3	42	1.0
HHS	137	1.0	46	0.5	91	2.3
NIH	58	0.4	8	0.1	50	1.2
Other HHS	79	0.6	38	0.4	41	1.0
NASA	54	0.4	11	0.1	43	1.1
NSF	304	2.3	110	1.2	194	4.8
USDA	322	2.4	175	1.8	147	3.7
Other	590	4.4	366	3.9	224	5.6
Nonfederal	4,747	35.2	2,611	27.5	2,136	53.3
Institutional	4,298	31.9	2,382	25.1	1,916	47.9
Domestic	424	3.1	222	2.3	202	5.0
Foreign	25	0.2	7	0.1	18	0.4

TABLE 4-12a

Natural resources and conservation master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	2,762	20.5	2,393	25.2	369	9.2
Primary mechanism of support for full-time students ^b						
Fellowships	883	6.5	396	4.2	487	12.2
Research assistantships	2,728	20.2	1,313	13.8	1,415	35.3
Teaching assistantships	1,379	10.2	666	7.0	713	17.8
Traineeships	130	1.0	106	1.1	24	0.6
Other types of support	3,908	29.0	3,283	34.6	625	15.6
Self-support	2,762	20.5	2,393	25.2	369	9.2
Other	1,146	8.5	890	9.4	256	6.4

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-12b

Natural resources and conservation postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	102	14.8	76	11.1
Schools	103	13.4	76	9.9
Units	177	0.8	140	0.6
All individuals	937	100.0	663	100.0
Male	495	52.8	396	59.7
Female	442	47.2	267	40.3
U.S. citizens and permanent residents ^a	557	59.4	na	na
Hispanic or Latino	33	3.5	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	2	0.2	na	na
Asian	49	5.2	na	na
Black or African American	11	1.2	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	376	40.1	na	na
More than one race	26	2.8	na	na
Unknown ethnicity and race	59	6.3	na	na
Temporary visa holders	380	40.6	na	na
Primary source of support				
Federal	437	46.6	na	na
Nonfederal ^b	433	46.2	na	na
Personal resources	18	1.9	na	na
Unknown or not stated	49	5.2	na	na
Primary mechanism of support				
Fellowships	59	6.3	na	na
Research grants	657	70.1	na	na
Traineeships	19	2.0	na	na
Other types of support	202	21.6	na	na
Degree type ^c				
Doctoral degree	684	73.0	419	63.2
Professional degree	14	1.5	14	2.1
Dual degree	2	0.2	2	0.3
Doctoral degree type unknown	237	25.3	228	34.4
Degree origin				
United States	421	44.9	na	na
Foreign country	166	17.7	na	na

TABLE 4-12b

Natural resources and conservation postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	350	37.4	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-13a

Physical sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	327	47.6	303	44.1	227	33.0
Schools	334	43.4	310	40.3	229	29.7
Units	786	3.4	559	2.5	556	2.4
All graduate students	44,329	100.0	6,000	100.0	38,329	100.0
Male	27,672	62.4	3,606	60.1	24,066	62.8
Female	16,657	37.6	2,394	39.9	14,263	37.2
U.S. citizens and permanent residents ^a	26,082	58.8	4,422	73.7	21,660	56.5
Hispanic or Latino	3,263	7.4	716	11.9	2,547	6.6
Not Hispanic or Latino						
American Indian or Alaska Native	46	0.1	5	0.1	41	0.1
Asian	2,821	6.4	418	7.0	2,403	6.3
Black or African American	1,133	2.6	315	5.3	818	2.1
Native Hawaiian or Other Pacific Islander	19	*	6	0.1	13	*
White	16,702	37.7	2,601	43.4	14,101	36.8
More than one race	1,124	2.5	182	3.0	942	2.5
Unknown ethnicity and race	974	2.2	179	3.0	795	2.1
Temporary visa holders	18,247	41.2	1,578	26.3	16,669	43.5
Part time	4,854	10.9	2,529	42.2	2,325	6.1
Full time	39,475	89.1	3,471	57.9	36,004	93.9
First time	8,858	20.0	1,591	26.5	7,267	19.0
Primary source of support for full-time students ^b						
Federal	10,449	23.6	319	5.3	10,130	26.4
DOD	788	1.8	74	1.2	714	1.9
DOE	2,144	4.8	26	0.4	2,118	5.5
HHS	1,947	4.4	22	0.4	1,925	5.0
NIH	1,749	3.9	18	0.3	1,731	4.5
Other HHS	198	0.4	4	0.1	194	0.5
NASA	615	1.4	22	0.4	593	1.5
NSF	4,017	9.1	78	1.3	3,939	10.3
USDA	42	0.1	6	0.1	36	0.1
Other	896	2.0	91	1.5	805	2.1
Nonfederal	26,250	59.2	1,603	26.7	24,647	64.3
Institutional	24,345	54.9	1,508	25.1	22,837	59.6
Domestic	1,684	3.8	74	1.2	1,610	4.2
Foreign	221	0.5	21	0.4	200	0.5

TABLE 4-13a

Physical sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	2,776	6.3	1,549	25.8	1,227	3.2
Primary mechanism of support for full-time students ^b						
Fellowships	5,101	11.5	95	1.6	5,006	13.1
Research assistantships	15,691	35.4	466	7.8	15,225	39.7
Teaching assistantships	13,491	30.4	920	15.3	12,571	32.8
Traineeships	563	1.3	68	1.1	495	1.3
Other types of support	4,629	10.4	1,922	32.0	2,707	7.1
Self-support	2,776	6.3	1,549	25.8	1,227	3.2
Other	1,853	4.2	373	6.2	1,480	3.9

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-13b

Physical sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	228	33.2	180	26.2
Schools	231	30.0	182	23.6
Units	578	2.5	451	2.0
All individuals	7,220	100.0	3,095	100.0
Male	5,281	73.1	2,372	76.6
Female	1,939	26.9	723	23.4
U.S. citizens and permanent residents ^a	2,648	36.7	na	na
Hispanic or Latino	165	2.3	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	10	0.1	na	na
Asian	586	8.1	na	na
Black or African American	54	0.7	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	1,471	20.4	na	na
More than one race	62	0.9	na	na
Unknown ethnicity and race	300	4.2	na	na
Temporary visa holders	4,572	63.3	na	na
Primary source of support				
Federal	3,924	54.3	na	na
Nonfederal ^b	2,724	37.7	na	na
Personal resources	62	0.9	na	na
Unknown or not stated	510	7.1	na	na
Primary mechanism of support				
Fellowships	646	8.9	na	na
Research grants	5,243	72.6	na	na
Traineeships	181	2.5	na	na
Other types of support	1,150	15.9	na	na
Degree type ^c				
Doctoral degree	5,298	73.4	2,392	77.3
Professional degree	120	1.7	72	2.3
Dual degree	17	0.2	6	0.2
Doctoral degree type unknown	1,785	24.7	625	20.2
Degree origin				
United States	2,461	34.1	na	na
Foreign country	2,019	28.0	na	na

TABLE 4-13b

Physical sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	2,740	38.0	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-14a

Psychology master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	469	68.3	419	61.0	242	35.2
Schools	480	62.3	425	55.2	247	32.1
Units	1,145	5.0	809	3.5	509	2.2
All graduate students	73,828	100.0	49,474	100.0	24,354	100.0
Male	14,730	20.0	9,022	18.2	5,708	23.4
Female	59,098	80.0	40,452	81.8	18,646	76.6
U.S. citizens and permanent residents ^a	67,988	92.1	46,370	93.7	21,618	88.8
Hispanic or Latino	13,803	18.7	10,496	21.2	3,307	13.6
Not Hispanic or Latino						
American Indian or Alaska Native	303	0.4	190	0.4	113	0.5
Asian	4,066	5.5	2,544	5.1	1,522	6.2
Black or African American	8,765	11.9	5,722	11.6	3,043	12.5
Native Hawaiian or Other Pacific Islander	153	0.2	120	0.2	33	0.1
White	34,623	46.9	23,337	47.2	11,286	46.3
More than one race	2,696	3.7	1,708	3.5	988	4.1
Unknown ethnicity and race	3,579	4.8	2,253	4.6	1,326	5.4
Temporary visa holders	5,840	7.9	3,104	6.3	2,736	11.2
Part time	26,349	35.7	20,903	42.3	5,446	22.4
Full time	47,479	64.3	28,571	57.7	18,908	77.6
First time	14,913	20.2	11,234	22.7	3,679	15.1
Primary source of support for full-time students ^b						
Federal	3,264	4.4	1,139	2.3	2,125	8.7
DOD	206	0.3	82	0.2	124	0.5
DOE	2	*	0	0.0	2	*
HHS	970	1.3	63	0.1	907	3.7
NIH	766	1.0	35	0.1	731	3.0
Other HHS	204	0.3	28	0.1	176	0.7
NASA	5	*	0	0.0	5	*
NSF	371	0.5	19	*	352	1.4
USDA	18	*	7	*	11	*
Other	1,692	2.3	968	2.0	724	3.0
Nonfederal	16,370	22.2	5,282	10.7	11,088	45.5
Institutional	15,632	21.2	5,064	10.2	10,568	43.4
Domestic	676	0.9	195	0.4	481	2.0
Foreign	62	0.1	23	*	39	0.2

TABLE 4-14a

Psychology master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	27,845	37.7	22,150	44.8	5,695	23.4
Primary mechanism of support for full-time students ^b						
Fellowships	2,129	2.9	255	0.5	1,874	7.7
Research assistantships	5,105	6.9	1,077	2.2	4,028	16.5
Teaching assistantships	5,984	8.1	1,191	2.4	4,793	19.7
Traineeships	848	1.1	262	0.5	586	2.4
Other types of support	33,413	45.3	25,786	52.1	7,627	31.3
Self-support	27,845	37.7	22,150	44.8	5,695	23.4
Other	5,568	7.5	3,636	7.3	1,932	7.9

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-14b

Psychology postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	141	20.5	119	17.3
Schools	152	19.7	125	16.2
Units	263	1.2	217	1.0
All individuals	1,344	100.0	950	100.0
Male	484	36.0	323	34.0
Female	860	64.0	627	66.0
U.S. citizens and permanent residents ^a	950	70.7	na	na
Hispanic or Latino	116	8.6	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	110	8.2	na	na
Black or African American	47	3.5	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	567	42.2	na	na
More than one race	21	1.6	na	na
Unknown ethnicity and race	87	6.5	na	na
Temporary visa holders	394	29.3	na	na
Primary source of support				
Federal	719	53.5	na	na
Nonfederal ^b	514	38.2	na	na
Personal resources	19	1.4	na	na
Unknown or not stated	92	6.8	na	na
Primary mechanism of support				
Fellowships	116	8.6	na	na
Research grants	806	60.0	na	na
Traineeships	112	8.3	na	na
Other types of support	310	23.1	na	na
Degree type ^c				
Doctoral degree	980	72.9	694	73.1
Professional degree	43	3.2	56	5.9
Dual degree	11	0.8	18	1.9
Doctoral degree type unknown	310	23.1	182	19.2
Degree origin				
United States	680	50.6	na	na
Foreign country	210	15.6	na	na

TABLE 4-14b

Psychology postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	454	33.8	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-15a

Social sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	409	59.5	395	57.5	210	30.6
Schools	421	54.7	407	52.9	216	28.1
Units	2,014	8.8	1,585	7.0	944	4.1
All graduate students	74,591	100.0	41,600	100.0	32,991	100.0
Male	33,683	45.2	18,181	43.7	15,502	47.0
Female	40,908	54.8	23,419	56.3	17,489	53.0
U.S. citizens and permanent residents ^a	52,500	70.4	32,287	77.6	20,213	61.3
Hispanic or Latino	8,171	11.0	5,553	13.3	2,618	7.9
Not Hispanic or Latino						
American Indian or Alaska Native	340	0.5	165	0.4	175	0.5
Asian	3,761	5.0	2,066	5.0	1,695	5.1
Black or African American	6,300	8.4	4,051	9.7	2,249	6.8
Native Hawaiian or Other Pacific Islander	113	0.2	78	0.2	35	0.1
White	29,079	39.0	17,738	42.6	11,341	34.4
More than one race	2,220	3.0	1,322	3.2	898	2.7
Unknown ethnicity and race	2,516	3.4	1,314	3.2	1,202	3.6
Temporary visa holders	22,091	29.6	9,313	22.4	12,778	38.7
Part time	20,245	27.1	15,339	36.9	4,906	14.9
Full time	54,346	72.9	26,261	63.1	28,085	85.1
First time	17,671	23.7	12,834	30.9	4,837	14.7
Primary source of support for full-time students ^b						
Federal	3,080	4.1	1,469	3.5	1,611	4.9
DOD	561	0.8	415	1.0	146	0.4
DOE	24	*	6	*	18	0.1
HHS	261	0.3	31	0.1	230	0.7
NIH	173	0.2	10	*	163	0.5
Other HHS	88	0.1	21	0.1	67	0.2
NASA	33	*	6	*	27	0.1
NSF	609	0.8	93	0.2	516	1.6
USDA	221	0.3	78	0.2	143	0.4
Other	1,371	1.8	840	2.0	531	1.6
Nonfederal	32,169	43.1	9,221	22.2	22,948	69.6
Institutional	30,610	41.0	8,494	20.4	22,116	67.0
Domestic	1,212	1.6	561	1.3	651	2.0
Foreign	347	0.5	166	0.4	181	0.5

TABLE 4-15a

Social sciences master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	19,097	25.6	15,571	37.4	3,526	10.7
Primary mechanism of support for full-time students ^b						
Fellowships	8,689	11.6	1,940	4.7	6,749	20.5
Research assistantships	6,122	8.2	1,790	4.3	4,332	13.1
Teaching assistantships	13,010	17.4	2,567	6.2	10,443	31.7
Traineeships	1,005	1.3	380	0.9	625	1.9
Other types of support	25,520	34.2	19,584	47.1	5,936	18.0
Self-support	19,097	25.6	15,571	37.4	3,526	10.7
Other	6,423	8.6	4,013	9.6	2,410	7.3

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-15b

Social sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	164	23.9	134	19.5
Schools	168	21.8	138	17.9
Units	770	3.4	533	2.3
All individuals	1,854	100.0	1,854	100.0
Male	864	46.6	862	46.5
Female	990	53.4	992	53.5
U.S. citizens and permanent residents ^a	1,158	62.5	na	na
Hispanic or Latino	130	7.0	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	14	0.8	na	na
Asian	144	7.8	na	na
Black or African American	91	4.9	na	na
Native Hawaiian or Other Pacific Islander	4	0.2	na	na
White	591	31.9	na	na
More than one race	37	2.0	na	na
Unknown ethnicity and race	147	7.9	na	na
Temporary visa holders	696	37.5	na	na
Primary source of support				
Federal	373	20.1	na	na
Nonfederal ^b	1,362	73.5	na	na
Personal resources	11	0.6	na	na
Unknown or not stated	108	5.8	na	na
Primary mechanism of support				
Fellowships	276	14.9	na	na
Research grants	942	50.8	na	na
Traineeships	98	5.3	na	na
Other types of support	538	29.0	na	na
Degree type ^c				
Doctoral degree	1,398	75.4	1,326	71.5
Professional degree	43	2.3	63	3.4
Dual degree	11	0.6	10	0.5
Doctoral degree type unknown	402	21.7	455	24.5
Degree origin				
United States	992	53.5	na	na
Foreign country	265	14.3	na	na

TABLE 4-15b

Social sciences postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	597	32.2	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-16a

Aerospace, aeronautical, and astronautical engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	66	9.6	66	9.6	50	7.3
Schools	66	8.6	66	8.6	50	6.5
Units	75	0.3	74	0.3	52	0.2
All graduate students	8,264	100.0	5,380	100.0	2,884	100.0
Male	6,620	80.1	4,311	80.1	2,309	80.1
Female	1,644	19.9	1,069	19.9	575	19.9
U.S. citizens and permanent residents ^a	6,227	75.4	4,422	82.2	1,805	62.6
Hispanic or Latino	778	9.4	588	10.9	190	6.6
Not Hispanic or Latino						
American Indian or Alaska Native	13	0.2	7	0.1	6	0.2
Asian	907	11.0	669	12.4	238	8.3
Black or African American	181	2.2	117	2.2	64	2.2
Native Hawaiian or Other Pacific Islander	8	0.1	6	0.1	2	0.1
White	3,873	46.9	2,712	50.4	1,161	40.3
More than one race	289	3.5	193	3.6	96	3.3
Unknown ethnicity and race	178	2.2	130	2.4	48	1.7
Temporary visa holders	2,037	24.6	958	17.8	1,079	37.4
Part time	2,817	34.1	2,497	46.4	320	11.1
Full time	5,447	65.9	2,883	53.6	2,564	88.9
First time	1,680	20.3	1,262	23.5	418	14.5
Primary source of support for full-time students ^b						
Federal	1,443	17.5	444	8.3	999	34.6
DOD	652	7.9	256	4.8	396	13.7
DOE	86	1.0	20	0.4	66	2.3
HHS	6	0.1	1	*	5	0.2
NIH	5	0.1	1	*	4	0.1
Other HHS	1	*	0	0.0	1	*
NASA	231	2.8	44	0.8	187	6.5
NSF	205	2.5	24	0.4	181	6.3
USDA	0	0.0	0	0.0	0	0.0
Other	263	3.2	99	1.8	164	5.7
Nonfederal	2,520	30.5	1,139	21.2	1,381	47.9
Institutional	2,030	24.6	969	18.0	1,061	36.8
Domestic	393	4.8	148	2.8	245	8.5
Foreign	97	1.2	22	0.4	75	2.6

TABLE 4-16a

Aerospace, aeronautical, and astronautical engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	1,484	18.0	1,300	24.2	184	6.4
Primary mechanism of support for full-time students ^b						
Fellowships	475	5.7	91	1.7	384	13.3
Research assistantships	2,065	25.0	604	11.2	1,461	50.7
Teaching assistantships	691	8.4	349	6.5	342	11.9
Traineeships	44	0.5	34	0.6	10	0.3
Other types of support	2,172	26.3	1,805	33.6	367	12.7
Self-support	1,484	18.0	1,300	24.2	184	6.4
Other	688	8.3	505	9.4	183	6.3

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-16b

Aerospace, aeronautical, and astronautical engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	41	6.0	31	4.5
Schools	41	5.3	31	4.0
Units	45	0.2	35	0.2
All individuals	254	100.0	166	100.0
Male	207	81.5	137	82.5
Female	47	18.5	29	17.5
U.S. citizens and permanent residents ^a	80	31.5	na	na
Hispanic or Latino	2	0.8	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	0	0.0	na	na
Asian	18	7.1	na	na
Black or African American	1	0.4	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	48	18.9	na	na
More than one race	2	0.8	na	na
Unknown ethnicity and race	9	3.5	na	na
Temporary visa holders	174	68.5	na	na
Primary source of support				
Federal	134	52.8	na	na
Nonfederal ^b	90	35.4	na	na
Personal resources	2	0.8	na	na
Unknown or not stated	28	11.0	na	na
Primary mechanism of support				
Fellowships	22	8.7	na	na
Research grants	173	68.1	na	na
Traineeships	1	0.4	na	na
Other types of support	58	22.8	na	na
Degree type ^c				
Doctoral degree	219	86.2	154	92.8
Professional degree	4	1.6	6	3.6
Dual degree	0	0.0	2	1.2
Doctoral degree type unknown	31	12.2	4	2.4
Degree origin				
United States	115	45.3	na	na
Foreign country	55	21.7	na	na

TABLE 4-16b

Aerospace, aeronautical, and astronautical engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	84	33.1	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-17a

Biological, biomedical, and biosystems engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	183	26.6	166	24.2	146	21.3
Schools	188	24.4	170	22.1	149	19.4
Units	244	1.1	206	0.9	170	0.7
All graduate students	15,203	100.0	5,204	100.0	9,999	100.0
Male	7,789	51.2	2,583	49.6	5,206	52.1
Female	7,414	48.8	2,621	50.4	4,793	47.9
U.S. citizens and permanent residents ^a	9,624	63.3	3,395	65.2	6,229	62.3
Hispanic or Latino	1,220	8.0	459	8.8	761	7.6
Not Hispanic or Latino						
American Indian or Alaska Native	20	0.1	8	0.2	12	0.1
Asian	1,972	13.0	770	14.8	1,202	12.0
Black or African American	587	3.9	225	4.3	362	3.6
Native Hawaiian or Other Pacific Islander	9	0.1	3	0.1	6	0.1
White	4,942	32.5	1,663	32.0	3,279	32.8
More than one race	440	2.9	156	3.0	284	2.8
Unknown ethnicity and race	434	2.9	111	2.1	323	3.2
Temporary visa holders	5,579	36.7	1,809	34.8	3,770	37.7
Part time	1,936	12.7	1,243	23.9	693	6.9
Full time	13,267	87.3	3,961	76.1	9,306	93.1
First time	4,143	27.3	2,345	45.1	1,798	18.0
Primary source of support for full-time students ^b						
Federal	3,548	23.3	183	3.5	3,365	33.7
DOD	187	1.2	21	0.4	166	1.7
DOE	20	0.1	1	*	19	0.2
HHS	2,262	14.9	64	1.2	2,198	22.0
NIH	2,001	13.2	55	1.1	1,946	19.5
Other HHS	261	1.7	9	0.2	252	2.5
NASA	9	0.1	2	*	7	0.1
NSF	686	4.5	31	0.6	655	6.6
USDA	64	0.4	15	0.3	49	0.5
Other	320	2.1	49	0.9	271	2.7
Nonfederal	6,865	45.2	1,269	24.4	5,596	56.0
Institutional	5,680	37.4	1,161	22.3	4,519	45.2
Domestic	1,106	7.3	98	1.9	1,008	10.1
Foreign	79	0.5	10	0.2	69	0.7

TABLE 4-17a

Biological, biomedical, and biosystems engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	2,854	18.8	2,509	48.2	345	3.5
Primary mechanism of support for full-time students ^b						
Fellowships	1,899	12.5	164	3.2	1,735	17.4
Research assistantships	5,505	36.2	442	8.5	5,063	50.6
Teaching assistantships	1,043	6.9	367	7.1	676	6.8
Traineeships	461	3.0	8	0.2	453	4.5
Other types of support	4,359	28.7	2,980	57.3	1,379	13.8
Self-support	2,854	18.8	2,509	48.2	345	3.5
Other	1,505	9.9	471	9.1	1,034	10.3

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-17b

Biological, biomedical, and biosystems engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	124	18.0	87	12.7
Schools	129	16.8	89	11.6
Units	156	0.7	126	0.6
All individuals	1,594	100.0	674	100.0
Male	964	60.5	403	59.8
Female	630	39.5	271	40.2
U.S. citizens and permanent residents ^a	667	41.8	na	na
Hispanic or Latino	59	3.7	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	162	10.2	na	na
Black or African American	23	1.4	na	na
Native Hawaiian or Other Pacific Islander	1	0.1	na	na
White	329	20.6	na	na
More than one race	18	1.1	na	na
Unknown ethnicity and race	74	4.6	na	na
Temporary visa holders	927	58.2	na	na
Primary source of support				
Federal	881	55.3	na	na
Nonfederal ^b	569	35.7	na	na
Personal resources	5	0.3	na	na
Unknown or not stated	139	8.7	na	na
Primary mechanism of support				
Fellowships	115	7.2	na	na
Research grants	1,108	69.5	na	na
Traineeships	67	4.2	na	na
Other types of support	304	19.1	na	na
Degree type ^c				
Doctoral degree	1,212	76.0	515	76.4
Professional degree	48	3.0	24	3.6
Dual degree	20	1.3	12	1.8
Doctoral degree type unknown	314	19.7	123	18.2
Degree origin				
United States	574	36.0	na	na
Foreign country	519	32.6	na	na

TABLE 4-17b

Biological, biomedical, and biosystems engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	501	31.4	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-18a

Chemical, petroleum, and chemical-related engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	150	21.8	141	20.5	126	18.3
Schools	151	19.6	142	18.4	126	16.4
Units	195	0.9	173	0.8	149	0.7
All graduate students	10,546	100.0	2,658	100.0	7,888	100.0
Male	6,896	65.4	1,817	68.4	5,079	64.4
Female	3,650	34.6	841	31.6	2,809	35.6
U.S. citizens and permanent residents ^a	4,899	46.5	1,350	50.8	3,549	45.0
Hispanic or Latino	520	4.9	165	6.2	355	4.5
Not Hispanic or Latino						
American Indian or Alaska Native	11	0.1	3	0.1	8	0.1
Asian	920	8.7	277	10.4	643	8.2
Black or African American	222	2.1	65	2.4	157	2.0
Native Hawaiian or Other Pacific Islander	5	*	2	0.1	3	*
White	2,846	27.0	723	27.2	2,123	26.9
More than one race	192	1.8	54	2.0	138	1.7
Unknown ethnicity and race	183	1.7	61	2.3	122	1.5
Temporary visa holders	5,647	53.5	1,308	49.2	4,339	55.0
Part time	1,218	11.5	831	31.3	387	4.9
Full time	9,328	88.5	1,827	68.7	7,501	95.1
First time	2,451	23.2	921	34.7	1,530	19.4
Primary source of support for full-time students ^b						
Federal	2,494	23.6	102	3.8	2,392	30.3
DOD	239	2.3	13	0.5	226	2.9
DOE	488	4.6	21	0.8	467	5.9
HHS	352	3.3	12	0.5	340	4.3
NIH	294	2.8	9	0.3	285	3.6
Other HHS	58	0.5	3	0.1	55	0.7
NASA	37	0.4	2	0.1	35	0.4
NSF	1,064	10.1	29	1.1	1,035	13.1
USDA	20	0.2	3	0.1	17	0.2
Other	294	2.8	22	0.8	272	3.4
Nonfederal	5,467	51.8	627	23.6	4,840	61.4
Institutional	4,366	41.4	520	19.6	3,846	48.8
Domestic	964	9.1	98	3.7	866	11.0
Foreign	137	1.3	9	0.3	128	1.6

TABLE 4-18a

Chemical, petroleum, and chemical-related engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	1,367	13.0	1,098	41.3	269	3.4
Primary mechanism of support for full-time students ^b						
Fellowships	1,543	14.6	94	3.5	1,449	18.4
Research assistantships	4,689	44.5	223	8.4	4,466	56.6
Teaching assistantships	1,086	10.3	169	6.4	917	11.6
Traineeships	47	0.4	7	0.3	40	0.5
Other types of support	1,963	18.6	1,334	50.2	629	8.0
Self-support	1,367	13.0	1,098	41.3	269	3.4
Other	596	5.7	236	8.9	360	4.6

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-18b

Chemical, petroleum, and chemical-related engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	116	16.9	74	10.8
Schools	117	15.2	74	9.6
Units	144	0.6	97	0.4
All individuals	1,501	100.0	349	100.0
Male	1,078	71.8	259	74.2
Female	423	28.2	90	25.8
U.S. citizens and permanent residents ^a	437	29.1	na	na
Hispanic or Latino	29	1.9	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	0	0.0	na	na
Asian	124	8.3	na	na
Black or African American	15	1.0	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	211	14.1	na	na
More than one race	16	1.1	na	na
Unknown ethnicity and race	42	2.8	na	na
Temporary visa holders	1,064	70.9	na	na
Primary source of support				
Federal	689	45.9	na	na
Nonfederal ^b	713	47.5	na	na
Personal resources	21	1.4	na	na
Unknown or not stated	78	5.2	na	na
Primary mechanism of support				
Fellowships	119	7.9	na	na
Research grants	1,108	73.8	na	na
Traineeships	18	1.2	na	na
Other types of support	256	17.1	na	na
Degree type ^c				
Doctoral degree	1,050	70.0	290	83.1
Professional degree	40	2.7	9	2.6
Dual degree	11	0.7	13	3.7
Doctoral degree type unknown	400	26.6	37	10.6
Degree origin				
United States	480	32.0	na	na
Foreign country	431	28.7	na	na

TABLE 4-18b

Chemical, petroleum, and chemical-related engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	590	39.3	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-19a

Civil, environmental, transportation and related engineering fields master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	210	30.6	206	30.0	143	20.8
Schools	212	27.5	208	27.0	144	18.7
Units	385	1.7	347	1.5	209	0.9
All graduate students	19,934	100.0	12,082	100.0	7,852	100.0
Male	13,233	66.4	8,121	67.2	5,112	65.1
Female	6,701	33.6	3,961	32.8	2,740	34.9
U.S. citizens and permanent residents ^a	8,993	45.1	6,588	54.5	2,405	30.6
Hispanic or Latino	1,353	6.8	1,081	8.9	272	3.5
Not Hispanic or Latino						
American Indian or Alaska Native	54	0.3	39	0.3	15	0.2
Asian	1,063	5.3	766	6.3	297	3.8
Black or African American	500	2.5	338	2.8	162	2.1
Native Hawaiian or Other Pacific Islander	14	0.1	8	0.1	6	0.1
White	5,331	26.7	3,889	32.2	1,442	18.4
More than one race	360	1.8	254	2.1	106	1.3
Unknown ethnicity and race	318	1.6	213	1.8	105	1.3
Temporary visa holders	10,941	54.9	5,494	45.5	5,447	69.4
Part time	5,004	25.1	4,098	33.9	906	11.5
Full time	14,930	74.9	7,984	66.1	6,946	88.5
First time	4,935	24.8	3,738	30.9	1,197	15.2
Primary source of support for full-time students ^b						
Federal	2,349	11.8	527	4.4	1,822	23.2
DOD	305	1.5	88	0.7	217	2.8
DOE	204	1.0	35	0.3	169	2.2
HHS	136	0.7	30	0.2	106	1.3
NIH	34	0.2	5	*	29	0.4
Other HHS	102	0.5	25	0.2	77	1.0
NASA	84	0.4	14	0.1	70	0.9
NSF	769	3.9	104	0.9	665	8.5
USDA	55	0.3	16	0.1	39	0.5
Other	796	4.0	240	2.0	556	7.1
Nonfederal	7,457	37.4	2,913	24.1	4,544	57.9
Institutional	6,575	33.0	2,631	21.8	3,944	50.2
Domestic	733	3.7	220	1.8	513	6.5
Foreign	149	0.7	62	0.5	87	1.1

TABLE 4-19a

Civil, environmental, transportation and related engineering fields master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	5,124	25.7	4,544	37.6	580	7.4
Primary mechanism of support for full-time students ^b						
Fellowships	1,204	6.0	358	3.0	846	10.8
Research assistantships	5,185	26.0	1,267	10.5	3,918	49.9
Teaching assistantships	1,789	9.0	727	6.0	1,062	13.5
Traineeships	72	0.4	27	0.2	45	0.6
Other types of support	6,680	33.5	5,605	46.4	1,075	13.7
Self-support	5,124	25.7	4,544	37.6	580	7.4
Other	1,556	7.8	1,061	8.8	495	6.3

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-19b

Civil, environmental, transportation and related engineering fields postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	126	18.3	93	13.5
Schools	128	16.6	94	12.2
Units	194	0.9	152	0.7
All individuals	1,070	100.0	654	100.0
Male	717	67.0	486	74.3
Female	353	33.0	168	25.7
U.S. citizens and permanent residents ^a	321	30.0	na	na
Hispanic or Latino	20	1.9	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	2	0.2	na	na
Asian	76	7.1	na	na
Black or African American	9	0.8	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	153	14.3	na	na
More than one race	10	0.9	na	na
Unknown ethnicity and race	51	4.8	na	na
Temporary visa holders	749	70.0	na	na
Primary source of support				
Federal	447	41.8	na	na
Nonfederal ^b	565	52.8	na	na
Personal resources	10	0.9	na	na
Unknown or not stated	48	4.5	na	na
Primary mechanism of support				
Fellowships	77	7.2	na	na
Research grants	809	75.6	na	na
Traineeships	13	1.2	na	na
Other types of support	171	16.0	na	na
Degree type ^c				
Doctoral degree	842	78.7	507	77.5
Professional degree	12	1.1	39	6.0
Dual degree	1	0.1	2	0.3
Doctoral degree type unknown	215	20.1	106	16.2
Degree origin				
United States	471	44.0	na	na
Foreign country	263	24.6	na	na

TABLE 4-19b

Civil, environmental, transportation and related engineering fields postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	336	31.4	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-20a

Electrical, electronics, communications and computer engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	261	38.0	255	37.1	177	25.8
Schools	267	34.7	261	33.9	179	23.2
Units	482	2.1	442	1.9	244	1.1
All graduate students	48,799	100.0	31,093	100.0	17,706	100.0
Male	37,299	76.4	23,359	75.1	13,940	78.7
Female	11,500	23.6	7,734	24.9	3,766	21.3
U.S. citizens and permanent residents ^a	17,263	35.4	11,853	38.1	5,410	30.6
Hispanic or Latino	2,124	4.4	1,617	5.2	507	2.9
Not Hispanic or Latino						
American Indian or Alaska Native	31	0.1	25	0.1	6	*
Asian	3,692	7.6	2,610	8.4	1,082	6.1
Black or African American	1,067	2.2	756	2.4	311	1.8
Native Hawaiian or Other Pacific Islander	18	*	13	*	5	*
White	8,610	17.6	5,657	18.2	2,953	16.7
More than one race	752	1.5	512	1.6	240	1.4
Unknown ethnicity and race	969	2.0	663	2.1	306	1.7
Temporary visa holders	31,536	64.6	19,240	61.9	12,296	69.4
Part time	11,442	23.4	9,207	29.6	2,235	12.6
Full time	37,357	76.6	21,886	70.4	15,471	87.4
First time	12,529	25.7	9,920	31.9	2,609	14.7
Primary source of support for full-time students ^b						
Federal	5,607	11.5	834	2.7	4,773	27.0
DOD	1,503	3.1	285	0.9	1,218	6.9
DOE	462	0.9	67	0.2	395	2.2
HHS	519	1.1	43	0.1	476	2.7
NIH	411	0.8	30	0.1	381	2.2
Other HHS	108	0.2	13	*	95	0.5
NASA	134	0.3	32	0.1	102	0.6
NSF	2,216	4.5	228	0.7	1,988	11.2
USDA	67	0.1	8	*	59	0.3
Other	706	1.4	171	0.5	535	3.0
Nonfederal	14,471	29.7	4,941	15.9	9,530	53.8
Institutional	11,976	24.5	4,157	13.4	7,819	44.2
Domestic	2,178	4.5	708	2.3	1,470	8.3
Foreign	317	0.6	76	0.2	241	1.4

TABLE 4-20a

Electrical, electronics, communications and computer engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	17,279	35.4	16,111	51.8	1,168	6.6
Primary mechanism of support for full-time students ^b						
Fellowships	2,150	4.4	332	1.1	1,818	10.3
Research assistantships	10,202	20.9	1,406	4.5	8,796	49.7
Teaching assistantships	3,822	7.8	1,399	4.5	2,423	13.7
Traineeships	217	0.4	99	0.3	118	0.7
Other types of support	20,966	43.0	18,650	60.0	2,316	13.1
Self-support	17,279	35.4	16,111	51.8	1,168	6.6
Other	3,687	7.6	2,539	8.2	1,148	6.5

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-20b

Electrical, electronics, communications and computer engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	139	20.2	111	16.2
Schools	140	18.2	112	14.5
Units	173	0.8	152	0.7
All individuals	1,339	100.0	799	100.0
Male	1,052	78.6	664	83.1
Female	287	21.4	135	16.9
U.S. citizens and permanent residents ^a	393	29.4	na	na
Hispanic or Latino	21	1.6	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	1	0.1	na	na
Asian	108	8.1	na	na
Black or African American	10	0.7	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	185	13.8	na	na
More than one race	13	1.0	na	na
Unknown ethnicity and race	55	4.1	na	na
Temporary visa holders	946	70.6	na	na
Primary source of support				
Federal	693	51.8	na	na
Nonfederal ^b	558	41.7	na	na
Personal resources	22	1.6	na	na
Unknown or not stated	66	4.9	na	na
Primary mechanism of support				
Fellowships	83	6.2	na	na
Research grants	1,030	76.9	na	na
Traineeships	24	1.8	na	na
Other types of support	202	15.1	na	na
Degree type ^c				
Doctoral degree	1,047	78.2	649	81.2
Professional degree	11	0.8	29	3.6
Dual degree	7	0.5	1	0.1
Doctoral degree type unknown	274	20.5	120	15.0
Degree origin				
United States	527	39.4	na	na
Foreign country	371	27.7	na	na

TABLE 4-20b

Electrical, electronics, communications and computer engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	441	32.9	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-21a

Industrial, manufacturing, systems engineering and operations research master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	150	21.8	143	20.8	89	13.0
Schools	151	19.6	144	18.7	90	11.7
Units	244	1.1	226	1.0	106	0.5
All graduate students	15,762	100.0	11,873	100.0	3,889	100.0
Male	11,153	70.8	8,551	72.0	2,602	66.9
Female	4,609	29.2	3,322	28.0	1,287	33.1
U.S. citizens and permanent residents ^a	7,498	47.6	6,012	50.6	1,486	38.2
Hispanic or Latino	1,121	7.1	1,006	8.5	115	3.0
Not Hispanic or Latino						
American Indian or Alaska Native	13	0.1	10	0.1	3	0.1
Asian	970	6.2	756	6.4	214	5.5
Black or African American	542	3.4	391	3.3	151	3.9
Native Hawaiian or Other Pacific Islander	4	*	3	*	1	*
White	4,084	25.9	3,220	27.1	864	22.2
More than one race	280	1.8	222	1.9	58	1.5
Unknown ethnicity and race	484	3.1	404	3.4	80	2.1
Temporary visa holders	8,264	52.4	5,861	49.4	2,403	61.8
Part time	6,471	41.1	5,586	47.0	885	22.8
Full time	9,291	58.9	6,287	53.0	3,004	77.2
First time	3,693	23.4	3,128	26.3	565	14.5
Primary source of support for full-time students ^b						
Federal	1,099	7.0	426	3.6	673	17.3
DOD	413	2.6	250	2.1	163	4.2
DOE	43	0.3	12	0.1	31	0.8
HHS	94	0.6	27	0.2	67	1.7
NIH	32	0.2	5	*	27	0.7
Other HHS	62	0.4	22	0.2	40	1.0
NASA	20	0.1	3	*	17	0.4
NSF	329	2.1	33	0.3	296	7.6
USDA	9	0.1	4	*	5	0.1
Other	191	1.2	97	0.8	94	2.4
Nonfederal	3,431	21.8	1,405	11.8	2,026	52.1
Institutional	2,986	18.9	1,196	10.1	1,790	46.0
Domestic	370	2.3	168	1.4	202	5.2
Foreign	75	0.5	41	0.3	34	0.9

TABLE 4-21a

Industrial, manufacturing, systems engineering and operations research master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	4,761	30.2	4,456	37.5	305	7.8
Primary mechanism of support for full-time students ^b						
Fellowships	519	3.3	125	1.1	394	10.1
Research assistantships	1,703	10.8	352	3.0	1,351	34.7
Teaching assistantships	916	5.8	249	2.1	667	17.2
Traineeships	45	0.3	39	0.3	6	0.2
Other types of support	6,108	38.8	5,522	46.5	586	15.1
Self-support	4,761	30.2	4,456	37.5	305	7.8
Other	1,347	8.5	1,066	9.0	281	7.2

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-21b

Industrial, manufacturing, systems engineering and operations research postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	51	7.4	32	4.7
Schools	52	6.8	32	4.2
Units	59	0.3	46	0.2
All individuals	170	100.0	221	100.0
Male	122	71.8	163	73.8
Female	48	28.2	58	26.2
U.S. citizens and permanent residents ^a	55	32.4	na	na
Hispanic or Latino	0	0.0	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	0	0.0	na	na
Asian	11	6.5	na	na
Black or African American	2	1.2	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	30	17.6	na	na
More than one race	2	1.2	na	na
Unknown ethnicity and race	10	5.9	na	na
Temporary visa holders	115	67.6	na	na
Primary source of support				
Federal	61	35.9	na	na
Nonfederal ^b	90	52.9	na	na
Personal resources	0	0.0	na	na
Unknown or not stated	19	11.2	na	na
Primary mechanism of support				
Fellowships	15	8.8	na	na
Research grants	110	64.7	na	na
Traineeships	4	2.4	na	na
Other types of support	41	24.1	na	na
Degree type ^c				
Doctoral degree	136	80.0	147	66.5
Professional degree	2	1.2	2	0.9
Dual degree	0	0.0	3	1.4
Doctoral degree type unknown	32	18.8	69	31.2
Degree origin				
United States	79	46.5	na	na
Foreign country	48	28.2	na	na

TABLE 4-21b

Industrial, manufacturing, systems engineering and operations research postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	43	25.3	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-22a

Mechanical engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	238	34.6	233	33.9	165	24.0
Schools	244	31.7	239	31.0	167	21.7
Units	310	1.4	287	1.3	179	0.8
All graduate students	27,014	100.0	15,335	100.0	11,679	100.0
Male	21,946	81.2	12,783	83.4	9,163	78.5
Female	5,068	18.8	2,552	16.6	2,516	21.5
U.S. citizens and permanent residents ^a	13,744	50.9	9,017	58.8	4,727	40.5
Hispanic or Latino	1,839	6.8	1,288	8.4	551	4.7
Not Hispanic or Latino						
American Indian or Alaska Native	33	0.1	21	0.1	12	0.1
Asian	2,045	7.6	1,389	9.1	656	5.6
Black or African American	586	2.2	365	2.4	221	1.9
Native Hawaiian or Other Pacific Islander	11	*	9	0.1	2	*
White	8,051	29.8	5,193	33.9	2,858	24.5
More than one race	673	2.5	450	2.9	223	1.9
Unknown ethnicity and race	506	1.9	302	2.0	204	1.7
Temporary visa holders	13,270	49.1	6,318	41.2	6,952	59.5
Part time	6,691	24.8	5,474	35.7	1,217	10.4
Full time	20,323	75.2	9,861	64.3	10,462	89.6
First time	6,294	23.3	4,549	29.7	1,745	14.9
Primary source of support for full-time students ^b						
Federal	4,254	15.7	786	5.1	3,468	29.7
DOD	1,072	4.0	266	1.7	806	6.9
DOE	593	2.2	112	0.7	481	4.1
HHS	351	1.3	42	0.3	309	2.6
NIH	261	1.0	19	0.1	242	2.1
Other HHS	90	0.3	23	0.1	67	0.6
NASA	191	0.7	34	0.2	157	1.3
NSF	1,417	5.2	163	1.1	1,254	10.7
USDA	50	0.2	11	0.1	39	0.3
Other	580	2.1	158	1.0	422	3.6
Nonfederal	9,845	36.4	3,442	22.4	6,403	54.8
Institutional	8,173	30.3	2,991	19.5	5,182	44.4
Domestic	1,420	5.3	386	2.5	1,034	8.9
Foreign	252	0.9	65	0.4	187	1.6

TABLE 4-22a

Mechanical engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	6,224	23.0	5,633	36.7	591	5.1
Primary mechanism of support for full-time students ^b						
Fellowships	1,576	5.8	290	1.9	1,286	11.0
Research assistantships	7,320	27.1	1,416	9.2	5,904	50.6
Teaching assistantships	2,915	10.8	924	6.0	1,991	17.0
Traineeships	182	0.7	90	0.6	92	0.8
Other types of support	8,330	30.8	7,141	46.6	1,189	10.2
Self-support	6,224	23.0	5,633	36.7	591	5.1
Other	2,106	7.8	1,508	9.8	598	5.1

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-22b

Mechanical engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	140	20.4	92	13.4
Schools	143	18.6	92	11.9
Units	167	0.7	111	0.5
All individuals	1,317	100.0	560	100.0
Male	1,065	80.9	466	83.2
Female	252	19.1	94	16.8
U.S. citizens and permanent residents ^a	381	28.9	na	na
Hispanic or Latino	29	2.2	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	4	0.3	na	na
Asian	122	9.3	na	na
Black or African American	14	1.1	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	169	12.8	na	na
More than one race	5	0.4	na	na
Unknown ethnicity and race	38	2.9	na	na
Temporary visa holders	936	71.1	na	na
Primary source of support				
Federal	655	49.7	na	na
Nonfederal ^b	571	43.4	na	na
Personal resources	14	1.1	na	na
Unknown or not stated	77	5.8	na	na
Primary mechanism of support				
Fellowships	96	7.3	na	na
Research grants	942	71.5	na	na
Traineeships	31	2.4	na	na
Other types of support	248	18.8	na	na
Degree type ^c				
Doctoral degree	1,032	78.4	408	72.9
Professional degree	28	2.1	14	2.5
Dual degree	2	0.2	17	3.0
Doctoral degree type unknown	255	19.4	121	21.6
Degree origin				
United States	486	36.9	na	na
Foreign country	358	27.2	na	na

TABLE 4-22b

Mechanical engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	473	35.9	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-23a

Metallurgical, mining, materials and related engineering fields master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	101	14.7	91	13.2	83	12.1
Schools	103	13.4	93	12.1	83	10.8
Units	151	0.7	125	0.5	109	0.5
All graduate students	7,244	100.0	2,462	100.0	4,782	100.0
Male	4,953	68.4	1,691	68.7	3,262	68.2
Female	2,291	31.6	771	31.3	1,520	31.8
U.S. citizens and permanent residents ^a	3,928	54.2	1,560	63.4	2,368	49.5
Hispanic or Latino	521	7.2	219	8.9	302	6.3
Not Hispanic or Latino						
American Indian or Alaska Native	12	0.2	6	0.2	6	0.1
Asian	545	7.5	200	8.1	345	7.2
Black or African American	181	2.5	74	3.0	107	2.2
Native Hawaiian or Other Pacific Islander	3	*	2	0.1	1	*
White	2,338	32.3	918	37.3	1,420	29.7
More than one race	186	2.6	70	2.8	116	2.4
Unknown ethnicity and race	142	2.0	71	2.9	71	1.5
Temporary visa holders	3,316	45.8	902	36.6	2,414	50.5
Part time	1,254	17.3	843	34.2	411	8.6
Full time	5,990	82.7	1,619	65.8	4,371	91.4
First time	1,615	22.3	783	31.8	832	17.4
Primary source of support for full-time students ^b						
Federal	1,785	24.6	169	6.9	1,616	33.8
DOD	375	5.2	61	2.5	314	6.6
DOE	399	5.5	32	1.3	367	7.7
HHS	132	1.8	14	0.6	118	2.5
NIH	50	0.7	2	0.1	48	1.0
Other HHS	82	1.1	12	0.5	70	1.5
NASA	52	0.7	7	0.3	45	0.9
NSF	606	8.4	28	1.1	578	12.1
USDA	13	0.2	0	0.0	13	0.3
Other	208	2.9	27	1.1	181	3.8
Nonfederal	3,112	43.0	600	24.4	2,512	52.5
Institutional	2,404	33.2	452	18.4	1,952	40.8
Domestic	641	8.8	141	5.7	500	10.5
Foreign	67	0.9	7	0.3	60	1.3

TABLE 4-23a

Metallurgical, mining, materials and related engineering fields master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	1,093	15.1	850	34.5	243	5.1
Primary mechanism of support for full-time students ^b						
Fellowships	732	10.1	85	3.5	647	13.5
Research assistantships	3,126	43.2	385	15.6	2,741	57.3
Teaching assistantships	586	8.1	129	5.2	457	9.6
Traineeships	37	0.5	2	0.1	35	0.7
Other types of support	1,509	20.8	1,018	41.3	491	10.3
Self-support	1,093	15.1	850	34.5	243	5.1
Other	416	5.7	168	6.8	248	5.2

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-23b

Metallurgical, mining, materials and related engineering fields postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	60	8.7	42	6.1
Schools	60	7.8	42	5.5
Units	84	0.4	58	0.3
All individuals	557	100.0	249	100.0
Male	428	76.8	201	80.7
Female	129	23.2	48	19.3
U.S. citizens and permanent residents ^a	150	26.9	na	na
Hispanic or Latino	7	1.3	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	3	0.5	na	na
Asian	40	7.2	na	na
Black or African American	4	0.7	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	72	12.9	na	na
More than one race	5	0.9	na	na
Unknown ethnicity and race	19	3.4	na	na
Temporary visa holders	407	73.1	na	na
Primary source of support				
Federal	277	49.7	na	na
Nonfederal ^b	244	43.8	na	na
Personal resources	10	1.8	na	na
Unknown or not stated	26	4.7	na	na
Primary mechanism of support				
Fellowships	24	4.3	na	na
Research grants	441	79.2	na	na
Traineeships	1	0.2	na	na
Other types of support	91	16.3	na	na
Degree type ^c				
Doctoral degree	378	67.9	207	83.1
Professional degree	4	0.7	8	3.2
Dual degree	6	1.1	2	0.8
Doctoral degree type unknown	169	30.3	32	12.9
Degree origin				
United States	186	33.4	na	na
Foreign country	142	25.5	na	na

TABLE 4-23b

Metallurgical, mining, materials and related engineering fields postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	229	41.1	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-24a

Other engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	203	29.5	182	26.5	128	18.6
Schools	209	27.1	188	24.4	129	16.8
Units	476	2.1	374	1.6	242	1.1
All graduate students	22,793	100.0	14,480	100.0	8,313	100.0
Male	16,197	71.1	10,279	71.0	5,918	71.2
Female	6,596	28.9	4,201	29.0	2,395	28.8
U.S. citizens and permanent residents ^a	11,293	49.5	7,331	50.6	3,962	47.7
Hispanic or Latino	1,128	4.9	781	5.4	347	4.2
Not Hispanic or Latino						
American Indian or Alaska Native	34	0.1	19	0.1	15	0.2
Asian	1,327	5.8	868	6.0	459	5.5
Black or African American	864	3.8	563	3.9	301	3.6
Native Hawaiian or Other Pacific Islander	8	*	4	*	4	*
White	6,840	30.0	4,391	30.3	2,449	29.5
More than one race	456	2.0	280	1.9	176	2.1
Unknown ethnicity and race	636	2.8	425	2.9	211	2.5
Temporary visa holders	11,500	50.5	7,149	49.4	4,351	52.3
Part time	7,119	31.2	5,628	38.9	1,491	17.9
Full time	15,674	68.8	8,852	61.1	6,822	82.1
First time	5,344	23.4	4,135	28.6	1,209	14.5
Primary source of support for full-time students ^b						
Federal	2,475	10.9	434	3.0	2,041	24.6
DOD	394	1.7	98	0.7	296	3.6
DOE	562	2.5	72	0.5	490	5.9
HHS	304	1.3	29	0.2	275	3.3
NIH	185	0.8	12	0.1	173	2.1
Other HHS	119	0.5	17	0.1	102	1.2
NASA	58	0.3	6	*	52	0.6
NSF	596	2.6	49	0.3	547	6.6
USDA	181	0.8	51	0.4	130	1.6
Other	380	1.7	129	0.9	251	3.0
Nonfederal	6,357	27.9	2,081	14.4	4,276	51.4
Institutional	5,207	22.8	1,553	10.7	3,654	44.0
Domestic	1,031	4.5	510	3.5	521	6.3
Foreign	119	0.5	18	0.1	101	1.2

TABLE 4-24a

Other engineering master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	6,842	30.0	6,337	43.8	505	6.1
Primary mechanism of support for full-time students ^b						
Fellowships	1,217	5.3	363	2.5	854	10.3
Research assistantships	4,865	21.3	738	5.1	4,127	49.6
Teaching assistantships	1,155	5.1	375	2.6	780	9.4
Traineeships	124	0.5	84	0.6	40	0.5
Other types of support	8,313	36.5	7,292	50.4	1,021	12.3
Self-support	6,842	30.0	6,337	43.8	505	6.1
Other	1,471	6.5	955	6.6	516	6.2

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-24b

Other engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	91	13.2	84	12.2
Schools	92	11.9	85	11.0
Units	178	0.8	176	0.8
All individuals	1,249	100.0	903	100.0
Male	886	70.9	683	75.6
Female	363	29.1	220	24.4
U.S. citizens and permanent residents ^a	432	34.6	na	na
Hispanic or Latino	35	2.8	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	2	0.2	na	na
Asian	129	10.3	na	na
Black or African American	24	1.9	na	na
Native Hawaiian or Other Pacific Islander	0	0.0	na	na
White	199	15.9	na	na
More than one race	8	0.6	na	na
Unknown ethnicity and race	35	2.8	na	na
Temporary visa holders	817	65.4	na	na
Primary source of support				
Federal	594	47.6	na	na
Nonfederal ^b	558	44.7	na	na
Personal resources	24	1.9	na	na
Unknown or not stated	73	5.8	na	na
Primary mechanism of support				
Fellowships	61	4.9	na	na
Research grants	932	74.6	na	na
Traineeships	25	2.0	na	na
Other types of support	231	18.5	na	na
Degree type ^c				
Doctoral degree	1,001	80.1	734	81.3
Professional degree	14	1.1	15	1.7
Dual degree	2	0.2	1	0.1
Doctoral degree type unknown	232	18.6	153	16.9
Degree origin				
United States	493	39.5	na	na
Foreign country	444	35.5	na	na

TABLE 4-24b

Other engineering postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	312	25.0	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-25a

Clinical medicine master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	274	39.9	267	38.9	115	16.7
Schools	292	37.9	284	36.9	122	15.8
Units	594	2.6	506	2.2	215	0.9
All graduate students	34,658	100.0	28,484	100.0	6,174	100.0
Male	8,273	23.9	6,538	23.0	1,735	28.1
Female	26,385	76.1	21,946	77.0	4,439	71.9
U.S. citizens and permanent residents ^a	30,630	88.4	25,710	90.3	4,920	79.7
Hispanic or Latino	4,538	13.1	3,867	13.6	671	10.9
Not Hispanic or Latino						
American Indian or Alaska Native	226	0.7	173	0.6	53	0.9
Asian	3,953	11.4	3,400	11.9	553	9.0
Black or African American	5,120	14.8	4,190	14.7	930	15.1
Native Hawaiian or Other Pacific Islander	57	0.2	46	0.2	11	0.2
White	13,548	39.1	11,240	39.5	2,308	37.4
More than one race	1,207	3.5	1,000	3.5	207	3.4
Unknown ethnicity and race	1,981	5.7	1,794	6.3	187	3.0
Temporary visa holders	4,028	11.6	2,774	9.7	1,254	20.3
Part time	14,232	41.1	11,784	41.4	2,448	39.7
Full time	20,426	58.9	16,700	58.6	3,726	60.3
First time	8,217	23.7	7,345	25.8	872	14.1
Primary source of support for full-time students ^b						
Federal	1,947	5.6	1,200	4.2	747	12.1
DOD	100	0.3	71	0.2	29	0.5
DOE	8	*	8	*	0	0.0
HHS	961	2.8	411	1.4	550	8.9
NIH	532	1.5	145	0.5	387	6.3
Other HHS	429	1.2	266	0.9	163	2.6
NASA	0	0.0	0	0.0	0	0.0
NSF	36	0.1	15	0.1	21	0.3
USDA	16	*	9	*	7	0.1
Other	826	2.4	686	2.4	140	2.3
Nonfederal	6,171	17.8	4,082	14.3	2,089	33.8
Institutional	5,489	15.8	3,616	12.7	1,873	30.3
Domestic	583	1.7	404	1.4	179	2.9
Foreign	99	0.3	62	0.2	37	0.6

TABLE 4-25a

Clinical medicine master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	12,308	35.5	11,418	40.1	890	14.4
Primary mechanism of support for full-time students ^b						
Fellowships	1,273	3.7	904	3.2	369	6.0
Research assistantships	1,946	5.6	755	2.7	1,191	19.3
Teaching assistantships	1,092	3.2	694	2.4	398	6.4
Traineeships	650	1.9	336	1.2	314	5.1
Other types of support	15,465	44.6	14,011	49.2	1,454	23.6
Self-support	12,308	35.5	11,418	40.1	890	14.4
Other	3,157	9.1	2,593	9.1	564	9.1

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-25b

Clinical medicine postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	137	19.9	112	16.3
Schools	163	21.2	129	16.8
Units	1,746	7.7	1,392	6.1
All individuals	16,393	100.0	7,798	100.0
Male	8,091	49.4	3,570	45.8
Female	8,302	50.6	4,228	54.2
U.S. citizens and permanent residents ^a	6,905	42.1	na	na
Hispanic or Latino	604	3.7	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	25	0.2	na	na
Asian	1,629	9.9	na	na
Black or African American	372	2.3	na	na
Native Hawaiian or Other Pacific Islander	25	0.2	na	na
White	3,366	20.5	na	na
More than one race	132	0.8	na	na
Unknown ethnicity and race	752	4.6	na	na
Temporary visa holders	9,488	57.9	na	na
Primary source of support				
Federal	7,678	46.8	na	na
Nonfederal ^b	6,373	38.9	na	na
Personal resources	250	1.5	na	na
Unknown or not stated	2,092	12.8	na	na
Primary mechanism of support				
Fellowships	1,803	11.0	na	na
Research grants	8,364	51.0	na	na
Traineeships	1,378	8.4	na	na
Other types of support	4,848	29.6	na	na
Degree type ^c				
Doctoral degree	9,828	60.0	4,482	57.5
Professional degree	2,595	15.8	974	12.5
Dual degree	655	4.0	268	3.4
Doctoral degree type unknown	3,315	20.2	2,074	26.6
Degree origin				
United States	5,141	31.4	na	na
Foreign country	6,816	41.6	na	na

TABLE 4-25b

Clinical medicine postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	4,436	27.1	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. Clinical medicine includes postdoctoral appointees and nonfaculty researchers in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified. For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-26a

Other health master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Institutions	403	58.7	373	54.3	207	30.1
Schools	428	55.6	389	50.5	221	28.7
Units	1,002	4.4	722	3.2	465	2.0
All graduate students	46,389	100.0	33,295	100.0	13,094	100.0
Male	10,383	22.4	6,205	18.6	4,178	31.9
Female	36,006	77.6	27,090	81.4	8,916	68.1
U.S. citizens and permanent residents ^a	39,683	85.5	29,648	89.0	10,035	76.6
Hispanic or Latino	5,792	12.5	4,718	14.2	1,074	8.2
Not Hispanic or Latino						
American Indian or Alaska Native	125	0.3	92	0.3	33	0.3
Asian	3,282	7.1	2,340	7.0	942	7.2
Black or African American	3,944	8.5	2,632	7.9	1,312	10.0
Native Hawaiian or Other Pacific Islander	45	0.1	35	0.1	10	0.1
White	23,487	50.6	17,644	53.0	5,843	44.6
More than one race	1,203	2.6	931	2.8	272	2.1
Unknown ethnicity and race	1,805	3.9	1,256	3.8	549	4.2
Temporary visa holders	6,706	14.5	3,647	11.0	3,059	23.4
Part time	11,805	25.4	8,160	24.5	3,645	27.8
Full time	34,584	74.6	25,135	75.5	9,449	72.2
First time	13,098	28.2	11,034	33.1	2,064	15.8
Primary source of support for full-time students ^b						
Federal	2,410	5.2	1,012	3.0	1,398	10.7
DOD	262	0.6	194	0.6	68	0.5
DOE	0	0.0	0	0.0	0	0.0
HHS	1,283	2.8	204	0.6	1,079	8.2
NIH	993	2.1	119	0.4	874	6.7
Other HHS	290	0.6	85	0.3	205	1.6
NASA	0	0.0	0	0.0	0	0.0
NSF	66	0.1	14	*	52	0.4
USDA	5	*	4	*	1	*
Other	794	1.7	596	1.8	198	1.5
Nonfederal	10,469	22.6	5,738	17.2	4,731	36.1
Institutional	9,393	20.2	5,087	15.3	4,306	32.9
Domestic	875	1.9	559	1.7	316	2.4
Foreign	201	0.4	92	0.3	109	0.8

TABLE 4-26a

Other health master's and doctoral student demographics, enrollment status, and funding: 2023

(Number and percent)

Characteristic	All graduate students		Master's students		Doctoral students	
	Number	Percent	Number	Percent	Number	Percent
Self-support	21,705	46.8	18,385	55.2	3,320	25.4
Primary mechanism of support for full-time students ^b						
Fellowships	1,179	2.5	358	1.1	821	6.3
Research assistantships	3,442	7.4	1,072	3.2	2,370	18.1
Teaching assistantships	2,834	6.1	1,384	4.2	1,450	11.1
Traineeships	511	1.1	208	0.6	303	2.3
Other types of support	26,618	57.4	22,113	66.4	4,505	34.4
Self-support	21,705	46.8	18,385	55.2	3,320	25.4
Other	4,913	10.6	3,728	11.2	1,185	9.0

* = value < 0.05%.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Funding data are available only for full-time students.

Note(s):

Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 4-26b

Other health postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Institutions	141	20.5	109	15.9
Schools	158	20.5	116	15.1
Units	430	1.9	360	1.6
All individuals	2,424	100.0	1,369	100.0
Male	1,145	47.2	592	43.2
Female	1,279	52.8	777	56.8
U.S. citizens and permanent residents ^a	1,245	51.4	na	na
Hispanic or Latino	80	3.3	na	na
Not Hispanic or Latino				
American Indian or Alaska Native	4	0.2	na	na
Asian	220	9.1	na	na
Black or African American	110	4.5	na	na
Native Hawaiian or Other Pacific Islander	3	0.1	na	na
White	522	21.5	na	na
More than one race	25	1.0	na	na
Unknown ethnicity and race	281	11.6	na	na
Temporary visa holders	1,179	48.6	na	na
Primary source of support				
Federal	1,133	46.7	na	na
Nonfederal ^b	1,102	45.5	na	na
Personal resources	11	0.5	na	na
Unknown or not stated	178	7.3	na	na
Primary mechanism of support				
Fellowships	285	11.8	na	na
Research grants	1,240	51.2	na	na
Traineeships	175	7.2	na	na
Other types of support	724	29.9	na	na
Degree type ^c				
Doctoral degree	1,440	59.4	696	50.8
Professional degree	470	19.4	138	10.1
Dual degree	40	1.7	26	1.9
Doctoral degree type unknown	474	19.6	509	37.2
Degree origin				
United States	1,000	41.3	na	na
Foreign country	610	25.2	na	na

TABLE 4-26b

Other health postdoctoral appointee and doctorate-holding nonfaculty researcher demographics and funding: 2023

(Number and percent)

Characteristic	Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	Number	Percent	Number	Percent
Unknown	814	33.6	na	na

na = not applicable; citizenship, race and ethnicity, source of support, mechanism of support, and degree origin data are not collected for doctorate-holding nonfaculty researchers.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Nonfederal includes foreign support.

^c Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 5-1
Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields, by institutional control: 2023

(Number and percent)

Broad field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent in public institutions	Total number	Percent in public institutions
	Total number	Percent in public institutions	Total number	Percent in public institutions	Total number	Percent in public institutions				
All broad fields	818,095	66.4	510,866	65.0	307,229	68.6	65,850	52.9	34,342	67.0
Science	561,489	65.2	348,520	63.8	212,969	67.6	37,982	56.0	20,600	68.2
Agricultural and veterinary sciences	11,755	94.2	6,901	93.4	4,854	95.5	1,993	90.4	1,238	93.0
Biological and biomedical sciences	105,566	61.4	44,703	57.4	60,863	64.3	19,520	50.0	8,589	57.6
Computer and information sciences	166,014	70.1	143,530	70.5	22,484	67.0	987	53.7	631	81.1
Geosciences, atmospheric, and ocean sciences	11,594	82.3	4,793	88.0	6,801	78.3	1,919	66.5	2,455	82.0
Mathematics and statistics	33,893	65.3	20,105	58.9	13,788	74.6	1,220	59.5	307	70.4
Multidisciplinary and interdisciplinary sciences	26,429	59.8	21,928	57.3	4,501	71.8	988	49.8	818	66.9
Natural resources and conservation	13,490	85.2	9,486	84.0	4,004	88.0	937	83.8	663	94.1
Physical sciences	44,329	72.0	6,000	72.1	38,329	71.9	7,220	58.7	3,095	70.1
Psychology	73,828	50.2	49,474	47.3	24,354	56.2	1,344	56.3	950	72.6
Social sciences	74,591	61.7	41,600	59.1	32,991	64.9	1,854	48.8	1,854	63.2
Engineering	175,559	68.7	100,567	66.2	74,992	72.1	9,051	58.3	4,575	75.6
Aerospace, aeronautical, and astronautical engineering	8,264	75.3	5,380	72.1	2,884	81.3	254	65.7	166	88.0
Biological, biomedical, and biosystems engineering	15,203	58.4	5,204	60.0	9,999	57.6	1,594	41.7	674	52.1
Chemical, petroleum, and chemical-related engineering	10,546	68.9	2,658	66.4	7,888	69.7	1,501	54.2	349	71.9
Civil, environmental, transportation and related engineering fields	19,934	76.3	12,082	74.1	7,852	79.7	1,070	67.5	654	83.5
Electrical, electronics, communications and computer engineering	48,799	64.9	31,093	60.3	17,706	73.1	1,339	61.5	799	77.8
Industrial, manufacturing, systems engineering and operations research	15,762	65.9	11,873	62.1	3,889	77.3	170	63.5	221	51.6
Mechanical engineering	27,014	70.5	15,335	68.9	11,679	72.7	1,317	60.2	560	80.9
Metallurgical, mining, materials and related engineering fields	7,244	77.1	2,462	75.8	4,782	77.8	557	63.6	249	88.4
Other engineering	22,793	71.7	14,480	71.1	8,313	72.7	1,249	66.7	903	83.8
Health	81,047	69.1	61,779	70.1	19,268	66.1	18,817	44.2	9,167	59.9
Clinical medicine ^a	34,658	65.3	28,484	66.0	6,174	61.7	16,393	39.2	7,798	56.4
Other health	46,389	72.0	33,295	73.5	13,094	68.2	2,424	77.9	1,369	80.1

^a Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences. Clinical medicine includes postdoctoral appointees and nonfaculty researchers in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 5-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields at HBCUs: 2023

(Number and percent)

Sex, citizenship, ethnicity, race, and broad field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent in HBCUs	Total number	Percent in HBCUs
	Total number	Percent in HBCUs	Total number	Percent in HBCUs	Total number	Percent in HBCUs				
All individuals	818,095	0.9	510,866	1.1	307,229	0.7	65,850	0.5	34,342	0.5
Male	422,321	0.8	258,675	0.8	163,646	0.6	37,458	0.4	19,495	0.5
Female	395,774	1.1	252,191	1.3	143,583	0.8	28,392	0.5	14,847	0.5
U.S. citizens and permanent residents ^a	495,808	1.2	313,609	1.4	182,199	0.9	27,701	0.8	na	na
Hispanic or Latino	70,428	0.3	48,099	0.3	22,329	0.3	2,352	0.6	na	na
Not Hispanic or Latino										
American Indian or Alaska Native	1,984	1.1	1,211	1.3	773	0.6	111	0.9	na	na
Asian	62,549	0.7	40,930	0.8	21,619	0.5	5,631	1.0	na	na
Black or African American	46,276	9.2	31,764	9.8	14,512	7.9	1,230	7.7	na	na
Native Hawaiian or Other Pacific Islander	754	0.7	544	0.9	210	*	57	1.8	na	na
White	269,477	0.2	163,247	0.3	106,230	0.1	14,585	0.2	na	na
More than one race	20,004	0.7	12,120	0.8	7,884	0.7	694	0.3	na	na
Unknown ethnicity and race	24,336	1.7	15,694	2.3	8,642	0.7	3,041	0.5	na	na
Temporary visa holders	322,287	0.5	197,257	0.4	125,030	0.6	38,149	0.2	na	na
Science	561,489	1.0	348,520	1.2	212,969	0.7	37,982	0.5	20,600	0.6
Agricultural and veterinary sciences	11,755	3.2	6,901	4.0	4,854	2.0	1,993	1.8	1,238	2.1
Biological and biomedical sciences	105,566	1.0	44,703	1.5	60,863	0.6	19,520	0.5	8,589	0.2
Computer and information sciences	166,014	0.8	143,530	0.8	22,484	0.6	987	0.2	631	0.5
Geosciences, atmospheric, and ocean sciences	11,594	0.7	4,793	1.1	6,801	0.4	1,919	0.4	2,455	2.1
Mathematics and statistics	33,893	0.4	20,105	0.3	13,788	0.5	1,220	0.2	307	0.3
Multidisciplinary and interdisciplinary sciences	26,429	0.2	21,928	0.2	4,501	*	988	0.2	818	0.1
Natural resources and conservation	13,490	1.5	9,486	1.4	4,004	1.8	937	0.6	663	1.1
Physical sciences	44,329	1.0	6,000	3.1	38,329	0.7	7,220	0.4	3,095	0.2
Psychology	73,828	1.5	49,474	1.8	24,354	0.9	1,344	*	950	0.4
Social sciences	74,591	1.0	41,600	1.3	32,991	0.8	1,854	0.2	1,854	0.4
Engineering	175,559	0.7	100,567	0.6	74,992	0.7	9,051	0.4	4,575	0.4
Aerospace, aeronautical, and astronautical engineering	8,264	*	5,380	*	2,884	*	254	*	166	*
Biological, biomedical, and biosystems engineering	15,203	0.1	5,204	0.3	9,999	0.1	1,594	*	674	*
Chemical, petroleum, and chemical-related engineering	10,546	0.2	2,658	0.6	7,888	0.1	1,501	0.3	349	*
Civil, environmental, transportation and related engineering fields	19,934	0.2	12,082	0.2	7,852	0.2	1,070	0.3	654	0.3
Electrical, electronics, communications and computer engineering	48,799	0.9	31,093	0.8	17,706	0.9	1,339	0.5	799	0.1
Industrial, manufacturing, systems engineering and operations research	15,762	0.5	11,873	0.2	3,889	1.4	170	1.2	221	*
Mechanical engineering	27,014	0.3	15,335	0.4	11,679	0.3	1,317	0.2	560	0.5
Metallurgical, mining, materials and related engineering fields	7,244	0.2	2,462	0.3	4,782	0.1	557	0.5	249	*

TABLE 5-2

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health broad fields at HBCUs: 2023

(Number and percent)

Sex, citizenship, ethnicity, race, and broad field	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Total number	Percent in HBCUs	Total number	Percent in HBCUs
	Total number	Percent in HBCUs	Total number	Percent in HBCUs	Total number	Percent in HBCUs				
Other engineering	22,793	2.0	14,480	1.6	8,313	2.7	1,249	1.0	903	1.2
Health	81,047	1.2	61,779	1.2	19,268	1.3	18,817	0.4	9,167	0.4
Clinical medicine ^b	34,658	1.2	28,484	1.0	6,174	2.3	16,393	*	7,798	0.2
Other health	46,389	1.2	33,295	1.3	13,094	0.8	2,424	3.1	1,369	1.2
Black or African American individuals										
Male	16,945	8.6	11,554	8.7	5,391	8.3	520	7.1	na	na
Female	29,331	9.5	20,210	10.4	9,121	7.6	710	8.2	na	na
Science	32,482	9.8	22,048	10.7	10,434	7.7	646	5.0	na	na
Agricultural and veterinary sciences	422	40.5	323	46.7	99	20.2	60	15.0	na	na
Biological and biomedical sciences	6,510	9.2	3,905	11.2	2,605	6.3	301	5.0	na	na
Computer and information sciences	6,351	7.4	5,529	7.4	822	7.5	18	11.1	na	na
Geosciences, atmospheric, and ocean sciences	311	11.6	143	17.5	168	6.5	30	*	na	na
Mathematics and statistics	768	9.0	548	8.8	220	9.5	13	*	na	na
Multidisciplinary and interdisciplinary sciences	1,458	2.6	1,206	3.2	252	*	21	9.5	na	na
Natural resources and conservation	464	23.5	306	16.3	158	37.3	11	*	na	na
Physical sciences	1,133	18.2	315	30.2	818	13.6	54	5.6	na	na
Psychology	8,765	9.9	5,722	12.5	3,043	4.9	47	*	na	na
Social sciences	6,300	9.7	4,051	9.9	2,249	9.3	91	1.1	na	na
Engineering	4,730	9.8	2,894	10.3	1,836	9.0	102	9.8	na	na
Aerospace, aeronautical, and astronautical engineering	181	*	117	*	64	*	1	*	na	na
Biological, biomedical, and biosystems engineering	587	2.9	225	5.8	362	1.1	23	*	na	na
Chemical, petroleum, and chemical-related engineering	222	3.6	65	6.2	157	2.5	15	13.3	na	na
Civil, environmental, transportation and related engineering fields	500	2.4	338	1.5	162	4.3	9	*	na	na
Electrical, electronics, communications and computer engineering	1,067	13.5	756	13.4	311	13.8	10	20.0	na	na
Industrial, manufacturing, systems engineering and operations research	542	7.7	391	4.1	151	17.2	2	*	na	na
Mechanical engineering	586	7.7	365	7.9	221	7.2	14	14.3	na	na
Metallurgical, mining, materials and related engineering fields	181	3.3	74	2.7	107	3.7	4	25.0	na	na
Other engineering	864	22.0	563	22.7	301	20.6	24	12.5	na	na
Health	9,064	6.8	6,822	6.5	2,242	7.6	482	11.0	na	na
Clinical medicine ^b	5,120	6.7	4,190	5.6	930	11.5	372	0.8	na	na
Other health	3,944	6.9	2,632	7.9	1,312	4.9	110	45.5	na	na

* = value < 0.05%; na = not applicable.

HBCU = historically Black college or university.

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.

^b Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences. Clinical medicine includes postdoctoral appointees and nonfaculty researchers in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). Percentages may not add to total because of rounding. For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 5-3

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health, by broad field and Carnegie classification: 2023

(Number and percent)

2021 Carnegie classification by area of study	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent				
All broad fields	818,095	100.0	510,866	100.0	307,229	100.0	65,850	100.0	34,342	100.0
Doctoral: highest research	548,593	67.1	297,668	58.3	250,925	81.7	54,748	83.1	30,146	87.8
Doctoral: higher research	122,091	14.9	90,805	17.8	31,286	10.2	2,736	4.2	2,102	6.1
Doctoral/Professional Universities	47,665	5.8	38,179	7.5	9,486	3.1	12	*	0	0.0
Master's: larger programs	68,638	8.4	65,737	12.9	2,901	0.9	91	0.1	40	0.1
Master's: medium programs	6,560	0.8	5,891	1.2	669	0.2	67	0.1	30	0.1
Master's: small programs and baccalaureate	2,470	0.3	2,168	0.4	302	0.1	51	0.1	16	*
Medical schools and centers	7,797	1.0	5,567	1.1	2,230	0.7	1,103	1.7	414	1.2
Other 4-year special focus	12,109	1.5	3,516	0.7	8,593	2.8	6,160	9.4	1,316	3.8
Not classified	2,172	0.3	1,335	0.3	837	0.3	882	1.3	278	0.8
Science	561,489	100.0	348,520	100.0	212,969	100.0	37,982	100.0	20,600	100.0
Doctoral: highest research	363,488	64.7	190,969	54.8	172,519	81.0	31,500	82.9	17,844	86.6
Doctoral: higher research	86,074	15.3	65,255	18.7	20,819	9.8	1,831	4.8	1,412	6.9
Doctoral/Professional Universities	37,888	6.7	30,610	8.8	7,278	3.4	6	*	0	0.0
Master's: larger programs	53,269	9.5	51,051	14.6	2,218	1.0	36	0.1	11	0.1
Master's: medium programs	4,572	0.8	4,096	1.2	476	0.2	52	0.1	13	0.1
Master's: small programs and baccalaureate	1,558	0.3	1,358	0.4	200	0.1	51	0.1	16	0.1
Medical schools and centers	4,462	0.8	2,811	0.8	1,651	0.8	608	1.6	401	1.9
Other 4-year special focus	8,267	1.5	1,260	0.4	7,007	3.3	3,045	8.0	643	3.1
Not classified	1,911	0.3	1,110	0.3	801	0.4	853	2.2	260	1.3
Engineering	175,559	100.0	100,567	100.0	74,992	100.0	9,051	100.0	4,575	100.0
Doctoral: highest research	142,462	81.1	75,700	75.3	66,762	89.0	8,369	92.5	3,999	87.4
Doctoral: higher research	21,344	12.2	14,320	14.2	7,024	9.4	492	5.4	484	10.6
Doctoral/Professional Universities	2,567	1.5	2,376	2.4	191	0.3	5	0.1	0	0.0
Master's: larger programs	7,167	4.1	6,837	6.8	330	0.4	28	0.3	29	0.6
Master's: medium programs	1,124	0.6	931	0.9	193	0.3	14	0.2	17	0.4
Master's: small programs and baccalaureate	393	0.2	318	0.3	75	0.1	0	0.0	0	0.0
Medical schools and centers	5	*	0	0.0	5	*	1	*	0	0.0
Other 4-year special focus	497	0.3	85	0.1	412	0.5	124	1.4	28	0.6
Not classified	0	0.0	0	0.0	0	0.0	18	0.2	18	0.4
Health	81,047	100.0	61,779	100.0	19,268	100.0	18,817	100.0	9,167	100.0
Doctoral: highest research	42,643	52.6	30,999	50.2	11,644	60.4	14,879	79.1	8,303	90.6
Doctoral: higher research	14,673	18.1	11,230	18.2	3,443	17.9	413	2.2	206	2.2
Doctoral/Professional Universities	7,210	8.9	5,193	8.4	2,017	10.5	1	*	0	0.0

TABLE 5-3

Graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health, by broad field and Carnegie classification: 2023

(Number and percent)

2021 Carnegie classification by area of study	Graduate students						Postdoctoral appointees		Doctorate-holding nonfaculty researchers	
	All graduate students		Master's		Doctoral		Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent				
Master's: larger programs	8,202	10.1	7,849	12.7	353	1.8	27	0.1	0	0.0
Master's: medium programs	864	1.1	864	1.4	0	0.0	1	*	0	0.0
Master's: small programs and baccalaureate	519	0.6	492	0.8	27	0.1	0	0.0	0	0.0
Medical schools and centers	3,330	4.1	2,756	4.5	574	3.0	494	2.6	13	0.1
Other 4-year special focus	3,345	4.1	2,171	3.5	1,174	6.1	2,991	15.9	645	7.0
Not classified	261	0.3	225	0.4	36	0.2	11	0.1	0	0.0

* = value < 0.05%.

Note(s):

Institutions are designated by 2021 Carnegie classification code. Percentages may not add to total because of rounding. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
All institutions ^a	-	818,095	561,489	175,559	81,047	-	598,588	411,971	131,607	55,010	-	219,507	149,518	43,952	26,037
Georgia Institute of Technology	1	17,040	12,663	4,327	50	12	6,447	2,964	3,462	21	1	10,593	9,699	865	29
Johns Hopkins U.	2	14,947	9,317	4,218	1,412	15	6,236	4,016	1,571	649	2	8,711	5,301	2,647	763
Arizona State U.	3	13,193	9,054	3,966	173	7	7,917	5,172	2,601	144	3	5,276	3,882	1,365	29
Northeastern U.	4	11,926	4,737	6,731	458	1	11,347	4,389	6,541	417	92	579	348	190	41
U. Michigan	5	11,564	6,239	4,597	728	2	9,985	5,531	3,745	709	24	1,579	708	852	19
Columbia U. in the City of New York	6	11,332	7,572	2,951	809	6	8,345	5,851	1,815	679	9	2,987	1,721	1,136	130
U. Southern California	7	11,144	7,081	3,170	893	3	9,156	6,092	2,371	693	16	1,988	989	799	200
New York U.	8	10,330	7,880	1,860	590	5	8,355	6,191	1,707	457	18	1,975	1,689	153	133
U. Illinois, Urbana-Champaign	9	10,293	7,092	3,008	193	4	8,577	5,676	2,714	187	22	1,716	1,416	294	6
Liberty U.	10	9,632	8,348	49	1,235	27	4,987	4,224	38	725	4	4,645	4,124	11	510
Purdue U.	11	9,315	3,597	5,253	465	20	5,749	2,717	2,700	332	5	3,566	880	2,553	133
U. Florida	12	8,879	6,183	2,060	636	19	5,840	3,928	1,457	455	8	3,039	2,255	603	181
Texas A&M U.	13	8,876	4,959	3,546	371	8	7,157	4,069	2,751	337	21	1,719	890	795	34
U. Washington	14	8,636	5,523	2,161	952	9	6,765	4,433	1,547	785	20	1,871	1,090	614	167
U. North Texas, Denton	15	7,643	6,728	711	204	14	6,273	5,505	591	177	30	1,370	1,223	120	27
U. California, Berkeley	16	7,540	4,791	2,087	662	18	6,013	3,538	2,072	403	28	1,527	1,253	15	259
U. Colorado	17	7,444	4,501	2,254	689	13	6,435	4,079	1,808	548	45	1,009	422	446	141
Pennsylvania State U.	18	7,377	4,539	2,624	214	24	5,312	3,312	1,806	194	15	2,065	1,227	818	20
U. Wisconsin-Madison	19	6,994	4,868	1,582	544	21	5,706	4,102	1,220	384	35	1,288	766	362	160
U. Maryland, The	20	6,741	3,952	1,818	971	22	5,438	3,407	1,485	546	32	1,303	545	333	425
Stanford U.	21	6,717	4,061	2,437	219	11	6,449	3,948	2,309	192	191	268	113	128	27
U. California, Los Angeles	22	6,608	3,887	2,114	607	10	6,608	3,887	2,114	607	618	0	0	0	0
Indiana U.	23	6,547	4,626	379	1,542	31	4,570	3,216	215	1,139	17	1,977	1,410	164	403
Boston U.	24	6,380	4,393	1,025	962	29	4,670	3,254	852	564	23	1,710	1,139	173	398
Carnegie Mellon U.	25	6,245	3,488	2,757	0	17	6,050	3,385	2,665	0	238	195	103	92	0
Cornell U.	26	6,225	4,087	2,026	112	16	6,120	3,999	2,023	98	344	105	88	3	14
George Washington U.	27	6,126	3,846	678	1,602	52	3,056	2,362	256	438	7	3,070	1,484	422	1,164
U. Minnesota	28	5,858	3,819	1,251	788	23	5,333	3,538	1,154	641	113	525	281	97	147
North Carolina State U.	29	5,784	3,093	2,691	0	28	4,693	2,578	2,115	0	41	1,091	515	576	0
U. California, San Diego	30	5,606	3,662	1,926	18	25	5,291	3,495	1,778	18	172	315	167	148	0
George Mason U.	31	5,563	4,610	559	394	40	3,683	3,148	314	221	19	1,880	1,462	245	173
Virginia Polytechnic Institute and State U.	32	5,508	3,260	2,179	69	34	4,213	2,350	1,803	60	33	1,295	910	376	9
U. Cincinnati	33	5,272	3,217	938	1,117	56	2,993	1,977	587	429	12	2,279	1,240	351	688
SUNY, U. Buffalo	34	5,260	3,156	1,672	432	38	4,100	2,473	1,268	359	37	1,160	683	404	73

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Chicago	35	5,219	4,898	321	0	30	4,653	4,338	315	0	96	566	560	6	0
National U.	36	5,198	4,997	0	201	61	2,660	2,538	0	122	10	2,538	2,459	0	79
U. Texas, Dallas	37	5,180	3,910	1,048	222	35	4,170	3,182	773	215	44	1,010	728	275	7
Massachusetts Institute of Technology	38	5,108	2,687	2,421	0	26	5,031	2,683	2,348	0	383	77	4	73	0
U. Texas, Arlington	39	4,971	3,223	1,657	91	41	3,634	2,463	1,132	39	31	1,337	760	525	52
Northwestern U.	40	4,783	3,249	1,300	234	37	4,129	2,761	1,215	153	74	654	488	85	81
U. South Florida, Tampa	41	4,764	2,866	734	1,164	42	3,572	2,399	595	578	36	1,192	467	139	586
Ohio State U.	42	4,703	2,810	1,606	287	32	4,427	2,651	1,520	256	184	276	159	86	31
U. North Carolina, Chapel Hill	43	4,514	2,707	122	1,685	39	3,958	2,631	122	1,205	99	556	76	0	480
Harvard U.	44	4,492	3,255	519	718	36	4,151	3,133	513	505	159	341	122	6	213
U. California, Davis	45	4,410	3,249	939	222	33	4,303	3,213	878	212	340	107	36	61	10
U. Arizona	46	4,087	2,891	653	543	69	2,545	1,818	400	327	27	1,542	1,073	253	216
U. Illinois, Chicago	47	4,050	1,933	811	1,306	48	3,099	1,554	653	892	49	951	379	158	414
Rutgers, State U. New Jersey	48	3,977	3,196	729	52	43	3,445	2,824	569	52	110	532	372	160	0
U. Pittsburgh	49	3,960	2,619	807	534	44	3,369	2,290	674	405	90	591	329	133	129
U. Utah	50	3,879	2,574	863	442	54	3,052	2,097	637	318	61	827	477	226	124
U. Georgia	51	3,875	3,293	252	330	45	3,339	2,798	236	305	109	536	495	16	25
Texas Tech U.	52	3,860	2,731	837	292	52	3,056	2,219	605	232	64	804	512	232	60
Colorado State U., Fort Collins	53	3,847	2,863	933	51	98	1,652	1,338	279	35	13	2,195	1,525	654	16
U. Central Florida	54	3,796	1,987	1,275	534	71	2,507	1,465	705	337	34	1,289	522	570	197
Michigan State U.	55	3,785	2,797	637	351	55	3,010	2,282	512	216	66	775	515	125	135
Auburn U.	56	3,771	2,626	1,011	134	79	2,195	1,458	629	108	25	1,576	1,168	382	26
U. Central Missouri	57	3,760	3,589	95	76	46	3,218	3,056	90	72	106	542	533	5	4
Florida State U.	58	3,712	2,907	449	356	68	2,582	2,046	330	206	39	1,130	861	119	150
U. Massachusetts, Amherst	59	3,637	2,626	657	354	59	2,813	2,134	531	148	62	824	492	126	206
Washington U., Saint Louis	60	3,544	2,252	1,025	267	47	3,185	2,090	863	232	152	359	162	162	35
U. Houston	61	3,488	1,770	1,533	185	62	2,646	1,335	1,157	154	59	842	435	376	31
Stevens Institute of Technology	62	3,435	2,038	1,397	0	66	2,592	1,689	903	0	58	843	349	494	0
U. Maryland, U. C.	63	3,338	3,338	0	0	566	35	35	0	0	6	3,303	3,303	0	0
U. Connecticut	64	3,316	1,986	947	383	60	2,682	1,697	672	313	78	634	289	275	70
Illinois Institute of Technology	65	3,292	2,562	693	37	63	2,642	2,113	525	4	76	650	449	168	33
U. California, Irvine	66	3,238	2,085	1,153	0	50	3,073	1,987	1,086	0	264	165	98	67	0
Lamar U.	67	3,223	2,573	407	243	83	2,085	1,608	324	153	38	1,138	965	83	90
Georgetown U.	68	3,192	3,084	0	108	64	2,638	2,573	0	65	101	554	511	0	43
Oregon State U.	69	3,169	2,155	706	308	74	2,388	1,647	588	153	65	781	508	118	155

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
SUNY, Stony Brook U.	70	3,165	2,314	629	222	58	2,908	2,190	544	174	199	257	124	85	48
Saint Louis U.	71	3,139	2,564	105	470	51	3,066	2,511	100	455	387	73	53	5	15
Florida Institute of Technology	72	3,131	2,629	502	0	191	767	435	332	0	11	2,364	2,194	170	0
Duke U.	73	3,076	2,099	890	87	49	3,076	2,099	890	87	618	0	0	0	0
U. Tennessee, Knoxville	74	3,060	1,776	1,025	259	106	1,602	986	490	126	29	1,458	790	535	133
Pepperdine U.	75	3,026	3,026	0	0	167	943	943	0	0	14	2,083	2,083	0	0
U. Pennsylvania	76	3,023	2,267	706	50	57	2,971	2,237	684	50	428	52	30	22	0
U. Virginia	77	3,017	1,931	909	177	67	2,590	1,703	725	162	133	427	228	184	15
Clemson U.	78	2,979	1,736	1,174	69	76	2,325	1,241	1,032	52	74	654	495	142	17
Iowa State U.	79	2,971	1,982	961	28	90	1,865	1,200	648	17	40	1,106	782	313	11
U. Alabama, Birmingham	80	2,924	1,776	588	560	93	1,836	1,389	233	214	42	1,088	387	355	346
Case Western Reserve U.	81	2,726	1,424	863	439	75	2,351	1,206	760	385	147	375	218	103	54
Syracuse U.	82	2,723	2,308	369	46	77	2,285	1,928	319	38	127	438	380	50	8
Tufts U.	83	2,719	2,181	391	147	82	2,100	1,729	292	79	83	619	452	99	68
New Jersey Institute of Technology	84	2,707	1,848	813	46	85	2,044	1,483	525	36	73	663	365	288	10
U. Delaware	85	2,696	1,926	682	88	73	2,446	1,721	644	81	207	250	205	38	7
Brown U.	86	2,684	2,225	380	79	65	2,600	2,156	365	79	370	84	69	15	0
Drexel U.	87	2,681	1,860	603	218	101	1,631	1,111	395	125	43	1,050	749	208	93
Florida International U.	88	2,634	1,753	488	393	84	2,070	1,418	392	260	97	564	335	96	133
Georgia State U.	89	2,568	1,978	44	546	80	2,130	1,735	43	352	127	438	243	1	194
Princeton U.	90	2,537	1,930	607	0	70	2,537	1,930	607	0	618	0	0	0	0
Yale U.	91	2,496	1,868	366	262	72	2,492	1,864	366	262	584	4	4	0	0
San Jose State U.	92	2,396	957	1,284	155	113	1,492	638	725	129	50	904	319	559	26
SUNY, U. Albany	93	2,381	1,956	140	285	114	1,478	1,270	80	128	51	903	686	60	157
U. California, Riverside	94	2,375	1,714	661	0	78	2,203	1,689	514	0	259	172	25	147	0
U. Oklahoma	95	2,342	1,634	625	83	96	1,676	1,207	419	50	71	666	427	206	33
U. New Haven	96	2,296	1,207	1,068	21	86	2,027	1,052	954	21	189	269	155	114	0
U. Kansas	97	2,277	1,623	366	288	91	1,847	1,330	308	209	132	430	293	58	79
U. North Carolina, Charlotte	98	2,273	1,679	414	180	104	1,609	1,191	286	132	72	664	488	128	48
Louisiana State U.	99	2,221	1,490	534	197	92	1,837	1,317	361	159	143	384	173	173	38
U. Missouri, Columbia	100	2,220	1,550	294	376	128	1,346	988	144	214	55	874	562	150	162
Rice U.	101	2,216	1,489	727	0	88	1,947	1,237	710	0	189	269	252	17	0
U. Kentucky	102	2,179	1,433	366	380	89	1,918	1,281	327	310	198	261	152	39	70
Vanderbilt U.	103	2,106	1,677	386	43	87	1,999	1,577	379	43	340	107	100	7	0
U. California, Santa Barbara	104	2,104	1,664	440	0	81	2,104	1,664	440	0	618	0	0	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Nebraska-Lincoln	105	2,077	1,479	538	60	105	1,605	1,133	415	57	123	472	346	123	3
Mississippi State U.	106	2,073	1,266	737	70	138	1,176	785	337	54	53	897	481	400	16
U. New Mexico	107	2,070	1,187	594	289	115	1,470	915	375	180	87	600	272	219	109
U. Memphis	107	2,070	1,644	215	211	118	1,452	1,184	140	128	84	618	460	75	83
Florida Atlantic U.	109	2,067	1,598	311	158	126	1,390	1,112	186	92	70	677	486	125	66
DePaul U.	110	2,065	1,752	65	248	108	1,578	1,311	43	224	121	487	441	22	24
U. Wisconsin-Milwaukee	111	2,059	1,454	198	407	100	1,638	1,127	155	356	135	421	327	43	51
Pace U.	112	2,050	1,995	27	28	95	1,731	1,690	18	23	171	319	305	9	5
Oklahoma State U.	113	2,049	1,398	503	148	112	1,531	1,084	338	109	114	518	314	165	39
Wayne State U.	114	2,042	1,265	371	406	117	1,465	956	234	275	94	577	309	137	131
SUNY, Binghamton U.	115	2,041	1,367	594	80	110	1,551	1,072	446	33	120	490	295	148	47
U. Texas Health Science Center, Houston	116	2,038	1,182	38	818	136	1,201	836	36	329	60	837	346	2	489
U. Denver	117	2,008	1,696	115	197	127	1,387	1,195	46	146	82	621	501	69	51
U. Miami	118	1,993	1,630	248	115	94	1,814	1,515	225	74	252	179	115	23	41
Eastern U.	119	1,991	1,991	0	0	258	444	444	0	0	26	1,547	1,547	0	0
U. Texas, San Antonio	120	1,989	1,442	455	92	146	1,132	823	251	58	56	857	619	204	34
San Diego State U.	121	1,977	1,229	351	397	119	1,447	900	181	366	111	530	329	170	31
Columbia U., Teachers C.	122	1,936	1,774	0	162	102	1,630	1,506	0	124	174	306	268	0	38
Northern Arizona U.	123	1,935	1,610	66	259	129	1,322	1,138	53	131	85	613	472	13	128
U. Massachusetts, Lowell	124	1,919	947	740	232	162	951	496	328	127	47	968	451	412	105
CUNY, Graduate Center	125	1,906	1,865	0	41	99	1,643	1,602	0	41	196	263	263	0	0
U. South Carolina	126	1,897	1,098	345	454	111	1,548	974	289	285	157	349	124	56	169
U. Iowa	127	1,877	1,284	277	316	103	1,614	1,101	232	281	196	263	183	45	35
Rochester Institute of Technology	128	1,807	1,336	455	16	124	1,420	1,067	352	1	141	387	269	103	15
West Virginia U.	129	1,764	1,042	421	301	122	1,438	857	335	246	169	326	185	86	55
U. Notre Dame	130	1,750	1,036	714	0	97	1,671	969	702	0	377	79	67	12	0
Kennesaw State U.	131	1,749	1,249	377	123	166	944	777	142	25	63	805	472	235	98
U. Alabama, Tuscaloosa	132	1,724	923	566	235	133	1,255	752	344	159	124	469	171	222	76
U. Hawaii, Manoa	133	1,717	1,265	265	187	123	1,426	1,073	225	128	182	291	192	40	59
Old Dominion U.	134	1,711	909	694	108	200	713	494	141	78	46	998	415	553	30
Tulane U.	135	1,706	980	94	632	125	1,407	933	94	380	180	299	47	0	252
California State U., Northridge	136	1,699	513	391	795	196	742	275	221	246	48	957	238	170	549
Washington State U.	137	1,692	1,208	383	101	116	1,467	1,062	320	85	220	225	146	63	16
U. Rochester	138	1,688	1,326	299	63	109	1,574	1,255	291	28	334	114	71	8	35
Kansas State U.	139	1,687	1,354	229	104	140	1,159	954	153	52	112	528	400	76	52

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Kent State U.	140	1,664	1,223	41	400	131	1,271	1,019	36	216	140	393	204	5	184
U. California, Santa Cruz	141	1,629	1,516	113	0	107	1,585	1,480	105	0	446	44	36	8	0
California State U., Fullerton	142	1,607	986	465	156	193	755	491	128	136	57	852	495	337	20
Temple U.	143	1,601	1,267	147	187	132	1,269	1,014	110	145	165	332	253	37	42
U. Maryland, Baltimore County	144	1,592	1,382	210	0	138	1,176	1,029	147	0	136	416	353	63	0
Emory U.	145	1,591	1,224	245	122	120	1,439	1,218	120	101	282	152	6	125	21
Colorado School of Mines	146	1,567	546	1,021	0	134	1,230	462	768	0	160	337	84	253	0
U. Massachusetts, Boston	147	1,557	1,333	0	224	159	965	916	0	49	89	592	417	0	175
Worcester Polytechnic Institute	148	1,554	620	934	0	185	810	389	421	0	68	744	231	513	0
U. Nevada, Reno	149	1,532	935	390	207	135	1,228	750	350	128	175	304	185	40	79
U. Missouri, Kansas City	150	1,531	1,285	187	59	142	1,156	1,001	125	30	147	375	284	62	29
California State U., Long Beach	151	1,527	1,014	350	163	160	963	666	192	105	97	564	348	158	58
Wichita State U.	152	1,515	1,048	411	56	155	1,000	741	206	53	115	515	307	205	3
U. Louisville	153	1,512	621	612	279	158	969	469	267	233	105	543	152	345	46
Utah State U.	154	1,501	977	342	182	218	600	321	160	119	52	901	656	182	63
Virginia Commonwealth U.	155	1,489	828	231	430	143	1,147	626	166	355	158	342	202	65	75
American U.	156	1,488	1,468	0	20	164	946	939	0	7	106	542	529	0	13
Cleveland State U.	157	1,478	753	658	67	144	1,144	561	518	65	163	334	192	140	2
California Institute of Technology	158	1,439	860	579	0	120	1,439	860	579	0	618	0	0	0	0
Baylor U.	158	1,439	865	95	479	137	1,188	748	91	349	206	251	117	4	130
Northern Illinois U.	160	1,436	970	163	303	176	884	713	85	86	103	552	257	78	217
Texas State U.	161	1,434	1,113	149	172	151	1,024	758	123	143	138	410	355	26	29
U. Arkansas, Fayetteville	162	1,414	710	599	105	198	724	285	360	79	69	690	425	239	26
Rowan U.	163	1,383	960	312	111	149	1,081	715	269	97	176	302	245	43	14
Northwest Missouri State U.	164	1,381	1,381	0	0	190	770	770	0	0	86	611	611	0	0
U. Bridgeport	165	1,379	1,014	115	250	153	1,018	864	90	64	151	361	150	25	186
Harrisburg U. of Science and Technology	166	1,374	1,292	0	82	130	1,321	1,243	0	78	425	53	49	0	4
New Mexico State U.	167	1,363	902	297	164	175	885	625	173	87	122	478	277	124	77
U. Texas, El Paso	168	1,350	671	528	151	180	847	431	315	101	117	503	240	213	50
Ohio U.	169	1,339	863	253	223	187	786	564	116	106	102	553	299	137	117
Missouri U. of Science and Technology	170	1,329	590	739	0	156	994	490	504	0	162	335	100	235	0
U. Illinois, Springfield	171	1,327	1,181	0	146	182	830	740	0	90	118	497	441	0	56
Southern Methodist U.	172	1,325	842	483	0	203	685	498	187	0	77	640	344	296	0
Central Michigan U.	173	1,308	1,175	16	117	150	1,074	961	5	108	214	234	214	11	9
Santa Clara U.	174	1,279	564	715	0	171	911	349	562	0	150	368	215	153	0

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Nova Southeastern U.	175	1,271	599	0	672	170	912	312	0	600	152	359	287	0	72
Wright State U.	176	1,268	895	336	37	145	1,138	837	265	36	312	130	58	71	1
Prairie View A&M U.	177	1,263	1,060	203	0	184	817	654	163	0	125	446	406	40	0
Naval Postgraduate School	178	1,246	528	718	0	178	871	525	346	0	147	375	3	372	0
Long Island U.	179	1,236	786	1	449	157	972	603	0	369	194	264	183	1	80
Michigan Technological U.	179	1,236	500	656	80	168	934	394	474	66	176	302	106	182	14
U. Oregon	181	1,223	1,144	0	79	141	1,157	1,079	0	78	396	66	65	0	1
Texas Woman's U.	182	1,217	795	0	422	254	455	260	0	195	67	762	535	0	227
U. Nevada, Las Vegas	183	1,210	811	175	224	181	834	579	118	137	145	376	232	57	87
U. Dayton	184	1,179	677	502	0	152	1,022	603	419	0	276	157	74	83	0
U. North Carolina, Greensboro	185	1,174	778	0	396	205	664	415	0	249	116	510	363	0	147
Missouri State U.	186	1,160	591	0	569	195	745	366	0	379	137	415	225	0	190
Clark U.	187	1,136	1,136	0	0	154	1,014	1,014	0	0	324	122	122	0	0
U. Rhode Island	188	1,135	678	224	233	189	778	474	143	161	154	357	204	81	72
Dartmouth C.	189	1,127	699	309	119	147	1,121	695	307	119	576	6	4	2	0
Miami U.	190	1,126	998	38	90	234	527	403	38	86	88	599	595	0	4
Brigham Young U.	191	1,120	674	355	91	241	494	313	117	64	80	626	361	238	27
North Dakota State U.	192	1,119	811	251	57	186	787	569	169	49	165	332	242	82	8
U. California, San Francisco	193	1,112	757	123	232	148	1,112	757	123	232	618	0	0	0	0
U. North Dakota	193	1,112	632	351	129	223	566	303	174	89	104	546	329	177	40
Antioch U.	195	1,104	1,104	0	0	163	947	947	0	0	276	157	157	0	0
U. New Hampshire	196	1,103	829	190	84	161	955	724	158	73	286	148	105	32	11
U. Idaho	197	1,093	875	218	0	219	599	503	96	0	119	494	372	122	0
California Baptist U.	198	1,078	852	5	221	183	826	672	0	154	205	252	180	5	67
U. West Florida	199	1,067	873	53	141	377	182	140	7	35	54	885	733	46	106
Portland State U.	200	1,064	867	110	87	204	677	556	53	68	141	387	311	57	19
Lehigh U.	201	1,061	543	507	11	173	897	491	395	11	265	164	52	112	0
Boston C.	202	1,049	1,027	0	22	164	946	927	0	19	346	103	100	0	3
U. Alabama, Huntsville	202	1,049	456	581	12	267	425	270	153	2	81	624	186	428	10
Southern Illinois U., Carbondale	204	1,044	729	167	148	172	901	639	143	119	296	143	90	24	29
U. Toledo	205	1,042	664	214	164	201	711	486	109	116	167	331	178	105	48
U. San Francisco	206	1,041	950	0	91	215	608	581	0	27	129	433	369	0	64
Maharishi U. of Management	207	1,026	1,026	0	0	174	894	894	0	0	309	132	132	0	0
Troy U.	208	1,021	1,000	0	21	285	387	376	0	11	78	634	624	0	10
U. Texas Rio Grande Valley	209	1,019	572	136	311	260	443	316	84	43	95	576	256	52	268

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Maine	210	1,017	746	232	39	199	716	502	175	39	178	301	244	57	0
Brandeis U.	211	1,016	1,013	0	3	177	882	881	0	1	306	134	132	0	2
Western Michigan U.	212	1,011	718	183	110	169	923	659	166	98	360	88	59	17	12
U. Wyoming	212	1,011	720	182	109	188	783	579	138	66	218	228	141	44	43
Claremont Graduate U.	214	971	797	0	174	222	572	500	0	72	139	399	297	0	102
U. Massachusetts, Dartmouth	215	966	750	190	26	208	641	532	108	1	170	325	218	82	25
Southern Arkansas U.	216	954	954	0	0	276	398	398	0	0	99	556	556	0	0
Rensselaer Polytechnic Institute	217	925	350	575	0	179	865	338	527	0	411	60	12	48	0
Montana State U.	217	925	725	200	0	192	766	596	170	0	273	159	129	30	0
Oakland U.	219	905	393	404	108	236	521	282	172	67	143	384	111	232	41
Lewis U.	220	890	809	7	74	206	661	583	7	71	217	229	226	0	3
California State U., Sacramento	221	881	531	218	132	304	344	168	73	103	108	537	363	145	29
California State Polytechnic U., Pomona	222	867	497	370	0	221	594	390	204	0	187	273	107	166	0
Southeast Missouri State U.	223	864	822	0	42	202	703	668	0	35	268	161	154	0	7
U. Vermont	224	860	597	122	141	206	661	490	103	68	234	199	107	19	73
California State U., Los Angeles	225	859	603	165	91	237	505	368	64	73	155	354	235	101	18
New School	226	846	846	0	0	197	726	726	0	0	326	120	120	0	0
U. San Diego	227	836	620	62	154	340	257	235	0	22	92	579	385	62	132
U. Mississippi	228	828	516	68	244	194	753	463	66	224	385	75	53	2	20
U. Nebraska, Omaha	229	820	820	0	0	285	387	387	0	0	129	433	433	0	0
U. Houston-Clear Lake	230	816	692	109	15	250	465	422	41	2	156	351	270	68	13
Sam Houston State U.	230	816	720	0	96	288	385	339	0	46	131	431	381	0	50
Loyola U., Chicago	232	803	630	20	153	209	631	545	11	75	259	172	85	9	78
Texas A&M U.-Kingsville	233	800	484	224	92	217	602	398	139	65	235	198	86	85	27
Southern Illinois U., Edwardsville	234	799	389	353	57	248	471	189	227	55	168	328	200	126	2
Ball State U.	235	796	720	0	76	269	420	354	0	66	145	376	366	0	10
U. Southern Mississippi	236	792	523	66	203	213	618	404	64	150	254	174	119	2	53
Grand Valley State U.	237	791	569	66	156	220	596	424	33	139	238	195	145	33	17
East Carolina U.	238	776	448	31	297	247	476	305	13	158	179	300	143	18	139
Georgia Southern U.	239	773	376	111	286	233	529	253	74	202	208	244	123	37	84
Marquette U.	240	758	416	165	177	246	482	251	103	128	184	276	165	62	49
Western Illinois U.	241	756	704	0	52	214	609	562	0	47	289	147	142	0	5
Yeshiva U.	242	744	546	0	198	230	549	382	0	167	238	195	164	0	31
Eastern Washington U.	243	740	254	0	486	210	629	212	0	417	336	111	42	0	69
Texas A&M U.-Commerce	244	731	646	0	85	321	286	272	0	14	126	445	374	0	71

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
CUNY, Baruch C.	245	724	674	50	0	418	136	128	8	0	91	588	546	42	0
National Louis U.	246	723	723	0	0	230	549	549	0	0	254	174	174	0	0
East Tennessee State U.	247	717	296	0	421	253	460	213	0	247	199	257	83	0	174
California Institute of Integral Studies	248	712	712	0	0	228	553	553	0	0	273	159	159	0	0
Bowling Green State U.	249	701	568	67	66	241	494	374	55	65	233	207	194	12	1
U. South Dakota	250	698	507	7	184	238	504	400	5	99	242	194	107	2	85
Barry U.	250	698	574	0	124	263	434	364	0	70	194	264	210	0	54
Rush U.	252	692	137	0	555	226	564	127	0	437	315	128	10	0	118
U. Puerto Rico, Mayaguez	253	689	430	236	23	211	628	407	210	11	408	61	23	26	12
North Carolina Agricultural and Technical State U.	254	686	319	367	0	248	471	231	240	0	226	215	88	127	0
U. Northern Colorado	255	678	486	0	192	295	365	234	0	131	173	313	252	0	61
South Dakota State U.	256	674	507	144	23	251	462	340	108	14	228	212	167	36	9
Towson U.	257	669	556	0	113	266	432	326	0	106	212	237	230	0	7
U. Louisiana, Lafayette	258	667	450	139	78	226	564	385	108	71	346	103	65	31	7
Illinois State U.	258	667	563	0	104	229	552	466	0	86	330	115	97	0	18
St. Cloud State U.	260	654	389	172	93	239	497	301	109	87	276	157	88	63	6
U. Akron	260	654	344	209	101	243	486	256	159	71	262	168	88	50	30
California State U., San Bernardino	262	648	623	0	25	225	565	540	0	25	371	83	83	0	0
Oregon Health and Science U.	263	640	313	93	234	245	483	277	92	114	276	157	36	1	120
Boise State U.	263	640	408	178	54	273	407	270	104	33	215	233	138	74	21
Texas A&M U.-Corpus Christi	265	635	575	18	42	232	543	517	13	13	356	92	58	5	29
U. Puerto Rico, Rio Piedras	266	633	633	0	0	252	461	461	0	0	259	172	172	0	0
U. California, Merced	267	631	410	201	20	212	626	409	199	18	578	5	1	2	2
U. of the Pacific	268	630	451	36	143	258	444	321	34	89	248	186	130	2	54
Howard U.	269	628	513	42	73	244	484	383	32	69	295	144	130	10	4
Adelphi U.	270	613	367	0	246	271	415	278	0	137	235	198	89	0	109
U. Montana	271	606	448	1	157	313	311	223	0	88	181	295	225	1	69
Baylor C. of Medicine	272	605	595	0	10	216	605	595	0	10	618	0	0	0	0
Villanova U.	272	605	221	367	17	291	380	169	200	11	220	225	52	167	6
U. Arkansas, Little Rock	274	602	573	20	9	282	391	374	14	3	229	211	199	6	6
New York Institute of Technology	275	599	476	90	33	256	453	375	58	20	292	146	101	32	13
CUNY, City C.	276	598	345	253	0	299	361	164	197	0	212	237	181	56	0
U. Nebraska, Medical Center	277	592	475	0	117	309	326	254	0	72	192	266	221	0	45
Azusa Pacific U.	278	586	523	0	63	267	425	375	0	50	268	161	148	0	13
California State U., Fresno	279	579	404	62	113	295	365	219	42	104	227	214	185	20	9

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Idaho State U.	280	572	293	90	189	311	315	175	50	90	199	257	118	40	99
U. Texas Southwestern Medical Center	281	570	495	75	0	223	566	492	74	0	584	4	3	1	0
U. Texas, Tyler	282	569	365	69	135	312	313	214	45	54	203	256	151	24	81
Fielding Graduate U.	283	553	553	0	0	240	496	496	0	0	415	57	57	0	0
U. Alaska, Fairbanks	284	550	497	53	0	360	216	184	32	0	163	334	313	21	0
Middle Tennessee State U.	285	549	516	0	33	336	259	237	0	22	183	290	279	0	11
Wake Forest U.	286	543	423	74	46	235	524	415	70	39	520	19	8	4	7
Marshall U.	287	538	368	22	148	273	407	255	14	138	310	131	113	8	10
Marymount U.	288	537	523	0	14	283	390	382	0	8	289	147	141	0	6
Hofstra U.	289	531	343	0	188	265	433	277	0	156	350	98	66	0	32
Regis U.	290	527	520	0	7	294	366	364	0	2	268	161	156	0	5
San Francisco State U.	290	527	482	45	0	307	337	308	29	0	246	190	174	16	0
Clarkson U.	292	526	231	295	0	283	390	204	186	0	305	136	27	109	0
Governors State U.	293	524	336	0	188	290	382	244	0	138	298	142	92	0	50
Fordham U.	294	522	522	0	0	297	364	364	0	0	275	158	158	0	0
Clarion U. Pennsylvania	295	520	217	0	303	343	254	50	0	204	192	266	167	0	99
Saint Mary's U. Minnesota	296	519	483	0	36	280	394	362	0	32	317	125	121	0	4
St. John's U., Queens	297	518	312	0	206	270	419	235	0	184	349	99	77	0	22
U. South Alabama	298	510	345	103	62	261	441	304	77	60	392	69	41	26	2
Roosevelt U.	299	503	503	0	0	279	395	395	0	0	339	108	108	0	0
Morgan State U.	300	491	195	151	145	257	448	175	140	133	447	43	20	11	12
U. Puerto Rico, Medical Sciences Campus	301	489	137	0	352	263	434	126	0	308	419	55	11	0	44
Palo Alto U.	302	488	488	0	0	275	400	400	0	0	360	88	88	0	0
U. New England	303	486	301	0	185	305	341	247	0	94	294	145	54	0	91
Embry-Riddle Aeronautical U.	304	485	130	355	0	255	454	119	335	0	483	31	11	20	0
Mercer U.	305	483	58	115	310	306	340	49	28	263	296	143	9	87	47
Eastern Michigan U.	306	479	356	0	123	366	203	132	0	71	184	276	224	0	52
U. North Texas, Health Science Center	307	478	463	0	15	262	435	421	0	14	447	43	42	0	1
Fairleigh Dickinson U.	308	477	448	3	26	308	331	316	2	13	292	146	132	1	13
SUNY, Downstate Health Sciences U.	309	473	58	5	410	353	230	56	5	169	209	243	2	0	241
CUNY, Queens C.	310	471	402	0	69	329	275	218	0	57	237	196	184	0	12
Southern U.	311	470	388	29	53	329	275	208	21	46	238	195	180	8	7
William and Mary	312	467	467	0	0	272	413	413	0	0	421	54	54	0	0
California State U., East Bay	313	466	384	0	82	300	360	280	0	80	342	106	104	0	2
Lawrence Technological U.	314	465	184	281	0	546	42	9	33	0	134	423	175	248	0

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Texas Health Science Center, San Antonio	315	464	251	27	186	292	369	245	15	109	351	95	6	12	77
Dakota State U.	316	458	438	0	20	323	284	275	0	9	254	174	163	0	11
West Chester U. Pennsylvania	317	457	273	0	184	334	264	140	0	124	243	193	133	0	60
U. Texas Medical Branch	318	456	350	0	106	347	240	183	0	57	224	216	167	0	49
Augusta U.	319	446	302	0	144	335	260	215	0	45	248	186	87	0	99
Seton Hall U.	320	444	275	0	169	360	216	142	0	74	218	228	133	0	95
A. T. Still U.	321	442	55	0	387	327	281	47	0	234	268	161	8	0	153
Loma Linda U.	322	441	185	0	256	314	304	138	0	166	303	137	47	0	90
Gannon U.	323	439	364	75	0	281	392	325	67	0	437	47	39	8	0
U. Tulsa	324	434	267	132	35	277	397	237	125	35	464	37	30	7	0
U. North Carolina, Wilmington	325	424	424	0	0	298	363	363	0	0	408	61	61	0	0
Murray State U.	326	420	375	0	45	302	355	310	0	45	397	65	65	0	0
Angelo State U.	327	414	399	0	15	386	175	166	0	9	211	239	233	0	6
California State U., Chico	328	407	324	0	83	344	251	177	0	74	280	156	147	0	9
Touro C.	329	404	314	0	90	309	326	237	0	89	382	78	77	0	1
California Polytechnic State U., San Luis Obispo	329	404	223	181	0	317	298	155	143	0	342	106	68	38	0
Endicott C.	331	402	386	0	16	496	65	65	0	0	160	337	321	0	16
Indiana Institute of Technology	332	401	398	0	3	302	355	352	0	3	440	46	46	0	0
U. Central Oklahoma	333	398	329	10	59	316	303	258	3	42	351	95	71	7	17
Icahn School of Medicine at Mt. Sinai	334	397	397	0	0	277	397	397	0	0	618	0	0	0	0
Uniformed Services U. of the Health Sciences	334	397	136	0	261	285	387	136	0	251	554	10	0	0	10
Eastern Kentucky U.	336	396	273	0	123	380	180	76	0	104	224	216	197	0	19
Pontifical Catholic U. Puerto Rico	337	393	393	0	0	392	172	172	0	0	222	221	221	0	0
Southern Connecticut State U.	338	390	190	9	191	354	228	81	6	141	267	162	109	3	50
U. Massachusetts, Medical School	339	385	385	0	0	288	385	385	0	0	618	0	0	0	0
Medical C. Wisconsin	339	385	246	43	96	314	304	235	42	27	374	81	11	1	69
Western Kentucky U.	339	385	162	0	223	333	272	90	0	182	335	113	72	0	41
Tennessee State U.	342	379	233	66	80	345	245	155	49	41	306	134	78	17	39
Appalachian State U.	343	377	274	0	103	320	291	189	0	102	367	86	85	0	1
Seattle U.	344	372	348	24	0	379	181	179	2	0	244	191	169	22	0
Columbus State U.	345	371	360	10	1	434	114	109	5	0	199	257	251	5	1
Albert Einstein C. of Medicine	346	368	320	0	48	293	368	320	0	48	618	0	0	0	0
North Carolina Central U.	347	367	255	0	112	338	258	148	0	110	338	109	107	0	2
Kean U.	348	365	224	0	141	328	278	169	0	109	365	87	55	0	32
CUNY, John Jay C. of Criminal Justice	349	364	364	0	0	403	154	154	0	0	232	210	210	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Texas A&M U., San Antonio	350	363	347	0	16	414	142	142	0	0	222	221	205	0	16
U. Arkansas for Medical Sciences	351	358	158	0	200	365	206	111	0	95	282	152	47	0	105
Scripps Research Institute	352	356	356	0	0	301	356	356	0	0	618	0	0	0	0
Louisiana Tech U.	353	347	187	110	50	325	283	144	91	48	400	64	43	19	2
Eastern Illinois U.	354	340	244	0	96	363	209	124	0	85	310	131	120	0	11
Saint Joseph's U.	355	339	278	0	61	467	86	71	0	15	204	253	207	0	46
New Mexico Institute of Mining and Technology	356	338	143	195	0	336	259	125	134	0	377	79	18	61	0
Bradley U.	357	336	214	122	0	318	297	194	103	0	457	39	20	19	0
Robert Morris U.	357	336	321	0	15	325	283	283	0	0	425	53	38	0	15
Western Washington U.	357	336	279	0	57	342	255	206	0	49	374	81	73	0	8
California State U., San Marcos	360	335	213	0	122	345	245	143	0	102	358	90	70	0	20
U. New Orleans	361	332	222	110	0	374	185	129	56	0	289	147	93	54	0
Northern Kentucky U.	362	331	130	0	201	464	90	35	0	55	210	241	95	0	146
Tennessee Technological U.	363	330	135	195	0	454	98	45	53	0	216	232	90	142	0
Eastern Virginia Medical School	364	327	39	0	288	405	153	39	0	114	254	174	0	0	174
Massachusetts C. of Pharmacy and Health Sciences	365	326	18	0	308	388	174	18	0	156	282	152	0	0	152
Stephen F. Austin State U.	366	324	245	0	79	367	197	122	0	75	316	127	123	0	4
SUNY, C. of Environmental Science and Forestry	367	319	262	57	0	323	284	232	52	0	469	35	30	5	0
New York Medical C.	367	319	187	0	132	352	231	147	0	84	360	88	40	0	48
CUNY, Brooklyn C.	367	319	233	0	86	440	108	52	0	56	229	211	181	0	30
U. North Florida	370	317	198	33	86	370	192	111	16	65	317	125	87	17	21
Florida A&M U.	371	315	202	72	41	341	256	152	66	38	412	59	50	6	3
Polytechnic U. Puerto Rico	372	314	72	242	0	389	173	40	133	0	299	141	32	109	0
U. Missouri, Saint Louis	372	314	297	0	17	395	166	164	0	2	286	148	133	0	15
U. Tennessee, Health Science Center	374	312	174	6	132	319	296	158	6	132	529	16	16	0	0
James Madison U.	375	311	200	0	111	372	188	156	0	32	321	123	44	0	79
Morehouse School of Medicine	376	310	137	0	173	329	275	121	0	154	469	35	16	0	19
Alabama A&M U.	377	309	160	84	65	380	180	87	43	50	313	129	73	41	15
Valparaiso U.	378	306	304	0	2	371	191	190	0	1	330	115	114	0	1
Indiana U. Pennsylvania	378	306	233	0	73	377	182	114	0	68	320	124	119	0	5
Philadelphia C. of Osteopathic Medicine	380	300	300	0	0	332	273	273	0	0	493	27	27	0	0
SUNY, Polytechnic Institute	380	300	239	11	50	375	183	161	0	22	328	117	78	11	28
Chapman U.	382	296	171	0	125	360	216	100	0	116	376	80	71	0	9
U. Louisiana, Monroe	383	293	202	0	91	385	176	114	0	62	328	117	88	0	29
Midwestern State U.	384	292	292	0	0	373	187	187	0	0	344	105	105	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Catholic U. of America	385	289	162	127	0	382	178	103	75	0	336	111	59	52	0
Minnesota State U., Mankato	386	288	172	27	89	409	151	76	10	65	303	137	96	17	24
Central Connecticut State U.	387	287	266	21	0	453	100	94	6	0	247	187	172	15	0
Rockefeller U.	388	286	286	0	0	321	286	286	0	0	618	0	0	0	0
Sage Colleges	388	286	286	0	0	489	75	75	0	0	229	211	211	0	0
Simmons U.	390	285	255	0	30	613	14	10	0	4	188	271	245	0	26
South Dakota School of Mines and Technology	391	283	59	224	0	351	232	51	181	0	431	51	8	43	0
Inter American U. Puerto Rico, Metro	391	283	215	0	68	358	218	171	0	47	397	65	44	0	21
U. Tennessee, Chattanooga	391	283	186	50	47	368	196	130	27	39	365	87	56	23	8
Duquesne U.	394	280	176	12	92	338	258	170	11	77	507	22	6	1	15
Northeastern Illinois U.	395	279	216	0	63	459	93	71	0	22	248	186	145	0	41
California State U., Dominguez Hills	396	278	278	0	0	355	224	224	0	0	421	54	54	0	0
Jacksonville U.	396	278	99	0	179	363	209	36	0	173	392	69	63	0	6
Fitchburg State U.	398	275	275	0	0	348	234	234	0	0	450	41	41	0	0
Northeastern State U.	399	270	194	0	76	386	175	114	0	61	351	95	80	0	15
U. of Saint Joseph	400	269	253	0	16	461	91	82	0	9	253	178	171	0	7
U. Baltimore	401	268	268	0	0	456	95	95	0	0	258	173	173	0	0
U. Nebraska, Kearney	402	263	154	0	109	481	80	21	0	59	251	183	133	0	50
Benedictine U.	403	261	96	0	165	456	95	60	0	35	263	166	36	0	130
Arkansas State U.	404	257	173	20	64	414	142	76	7	59	330	115	97	13	5
U. Northern Iowa	405	255	139	0	116	400	160	47	0	113	351	95	92	0	3
U. Hartford	406	254	194	60	0	446	105	84	21	0	285	149	110	39	0
Central Washington U.	407	252	235	0	17	395	166	157	0	9	367	86	78	0	8
William Paterson U.	408	250	128	0	122	393	171	89	0	82	377	79	39	0	40
Austin Peay State U.	409	249	223	0	26	440	108	82	0	26	299	141	141	0	0
Emporia State U.	409	249	249	0	0	440	108	108	0	0	299	141	141	0	0
U. Indianapolis	411	247	107	0	140	434	114	75	0	39	308	133	32	0	101
California State Polytechnic U., Humboldt	412	243	238	5	0	389	173	168	5	0	391	70	70	0	0
Andrews U.	412	243	49	0	194	402	155	48	0	107	360	88	1	0	87
Indiana State U.	414	241	197	0	44	407	152	109	0	43	359	89	88	0	1
Oklahoma City U.	415	240	197	0	43	382	178	170	0	8	405	62	27	0	35
Loyola U., Maryland	415	240	151	0	89	394	167	78	0	89	387	73	73	0	0
U. West Georgia	417	239	176	0	63	469	85	53	0	32	281	154	123	0	31
Keck Graduate Institute	418	237	157	31	49	348	234	154	31	49	598	3	3	0	0
U. Michigan, Flint	419	236	115	3	118	389	173	71	0	102	402	63	44	3	16

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Texas Christian U.	420	235	167	0	68	348	234	166	0	68	609	1	1	0	0
Loyola Marymount U.	420	235	132	99	4	369	194	123	69	2	450	41	9	30	2
U. Wisconsin-La Crosse	422	233	209	12	12	492	69	54	5	10	265	164	155	7	2
Eastern New Mexico U.	423	232	101	0	131	405	153	65	0	88	377	79	36	0	43
U. Central Arkansas	423	232	116	0	116	416	141	51	0	90	357	91	65	0	26
Midwestern U.	425	230	230	0	0	358	218	218	0	0	547	12	12	0	0
Southeastern Louisiana U.	426	229	104	0	125	375	183	78	0	105	440	46	26	0	20
Chicago State U.	427	228	219	0	9	419	135	129	0	6	355	93	90	0	3
Touro U., Vallejo	428	227	0	0	227	357	219	0	0	219	570	8	0	0	8
Hood C.	428	227	227	0	0	446	105	105	0	0	324	122	122	0	0
Butler U.	430	226	58	0	168	566	35	0	0	35	244	191	58	0	133
Meharry Medical C.	431	222	193	0	29	356	222	193	0	29	618	0	0	0	0
Citadel Military C. South Carolina	432	218	164	40	14	514	57	43	8	6	268	161	121	32	8
Medical U. South Carolina	433	210	141	0	69	398	162	139	0	23	436	48	2	0	46
U. Wisconsin-Eau Claire	434	205	100	0	105	477	82	23	0	59	321	123	77	0	46
SUNY, New Paltz	435	204	138	8	58	395	166	106	5	55	459	38	32	3	3
U. North Alabama	435	204	143	31	30	499	64	38	3	23	302	140	105	28	7
Oklahoma Christian U.	437	201	0	201	0	401	156	0	156	0	444	45	0	45	0
Valdosta State U.	438	197	83	0	114	398	162	48	0	114	469	35	35	0	0
Calvin U.	439	196	13	0	183	429	119	5	0	114	383	77	8	0	69
U. Houston-Victoria	439	196	196	0	0	479	81	81	0	0	330	115	115	0	0
West Texas A&M U.	441	190	99	30	61	443	107	48	8	51	371	83	51	22	10
Youngstown State U.	442	189	105	84	0	403	154	85	69	0	469	35	20	15	0
La Salle U.	443	188	137	0	51	407	152	102	0	50	468	36	35	0	1
Texas Southern U.	443	188	170	0	18	411	147	130	0	17	450	41	40	0	1
Kansas City U. of Medicine and Biosciences	445	187	118	0	69	382	178	113	0	65	564	9	5	0	4
Montana Tech of U. Montana	446	185	40	60	85	516	56	19	28	9	313	129	21	32	76
California State U., Monterey Bay	447	180	105	0	75	410	148	75	0	73	481	32	30	0	2
Fort Hays State U.	448	175	139	0	36	412	143	108	0	35	481	32	31	0	1
Monmouth U.	449	174	84	6	84	432	116	30	2	84	414	58	54	4	0
Niagara U.	449	174	174	0	0	437	112	112	0	0	405	62	62	0	0
Weber State U.	449	174	57	27	90	439	109	24	2	83	397	65	33	25	7
Chatham U.	452	169	169	0	0	419	135	135	0	0	473	34	34	0	0
Manhattan C.	452	169	0	169	0	425	128	0	128	0	450	41	0	41	0
Norfolk State U.	454	168	133	35	0	446	105	81	24	0	402	63	52	11	0

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
C. Charleston	455	167	167	0	0	477	82	82	0	0	369	85	85	0	0
Salem State U.	456	165	165	0	0	485	77	77	0	0	360	88	88	0	0
U. Alaska, Anchorage	456	165	105	22	38	499	64	55	1	8	348	101	50	21	30
California Lutheran U.	458	162	162	0	0	412	143	143	0	0	520	19	19	0	0
Stockton U.	459	161	95	0	66	446	105	43	0	62	416	56	52	0	4
U. of the District of Columbia	460	160	107	27	26	427	122	78	21	23	459	38	29	6	3
CUNY, Lehman C.	461	159	34	0	125	571	34	24	0	10	317	125	10	0	115
Avila U.	462	155	145	0	10	421	133	123	0	10	507	22	22	0	0
Framingham State U.	463	154	154	0	0	636	6	6	0	0	286	148	148	0	0
SUNY, Buffalo State	464	152	106	4	42	461	91	50	1	40	408	61	56	3	2
U. Detroit Mercy	464	152	35	103	14	479	81	16	51	14	390	71	19	52	0
Tuskegee U.	466	151	125	19	7	423	130	107	16	7	511	21	18	3	0
U. Texas of the Permian Basin	466	151	142	6	3	451	104	97	4	3	437	47	45	2	0
Western Carolina U.	468	148	85	0	63	424	129	67	0	62	520	19	18	0	1
East Stroudsburg U. Pennsylvania	468	148	27	0	121	443	107	19	0	88	450	41	8	0	33
Jackson State U.	470	147	100	47	0	474	83	56	27	0	400	64	44	20	0
Bridgewater State U.	471	144	113	0	31	454	98	67	0	31	440	46	46	0	0
SUNY, Upstate Medical U.	472	142	142	0	0	416	141	141	0	0	609	1	1	0	0
Dominican U. California	473	141	141	0	0	438	110	110	0	0	483	31	31	0	0
Iona C.	474	140	75	0	65	429	119	56	0	63	511	21	19	0	2
Molloy C.	474	140	19	0	121	467	86	9	0	77	421	54	10	0	44
Mississippi C.	476	138	138	0	0	436	113	113	0	0	498	25	25	0	0
Sonoma State U.	477	136	114	22	0	474	83	73	10	0	425	53	41	12	0
Pittsburg State U.	478	133	117	0	16	443	107	107	0	0	497	26	10	0	16
Pardee RAND Graduate School	479	132	132	0	0	422	132	132	0	0	618	0	0	0	0
U. Wisconsin-Stevens Point	479	132	74	0	58	485	77	19	0	58	419	55	55	0	0
Western Connecticut State U.	479	132	132	0	0	624	9	9	0	0	321	123	123	0	0
Shippensburg U. Pennsylvania	482	131	131	0	0	431	117	117	0	0	540	14	14	0	0
Creighton U.	482	131	77	0	54	452	101	71	0	30	487	30	6	0	24
SUNY, Oswego	482	131	52	0	79	469	85	38	0	47	440	46	14	0	32
Abilene Christian U.	485	129	45	0	84	426	124	40	0	84	578	5	5	0	0
Nicholls State U.	485	129	129	0	0	461	91	91	0	0	459	38	38	0	0
Radford U.	487	126	68	0	58	433	115	57	0	58	551	11	11	0	0
Florida Gulf Coast U.	488	123	94	14	15	503	61	53	4	4	405	62	41	10	11
Arcadia U.	488	123	112	0	11	549	40	37	0	3	371	83	75	0	8

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
MGH Institute of Health Professions	490	122	0	0	122	427	122	0	0	122	618	0	0	0	0
Fayetteville State U.	490	122	101	0	21	491	70	61	0	9	428	52	40	0	12
Texas A&M U.-Central Texas	490	122	122	0	0	644	3	3	0	0	327	119	119	0	0
Lipscomb U.	493	118	115	1	2	469	85	83	0	2	476	33	32	1	0
Geisinger Commonwealth School of Medicine	494	117	117	0	0	464	90	90	0	0	493	27	27	0	0
Jacksonville State U.	494	117	117	0	0	503	61	61	0	0	416	56	56	0	0
U. Dallas	496	115	115	0	0	543	43	43	0	0	389	72	72	0	0
Lincoln Memorial U.	497	113	113	0	0	487	76	76	0	0	464	37	37	0	0
Alcorn State U.	497	113	113	0	0	495	66	66	0	0	437	47	47	0	0
Sul Ross State U.	497	113	89	0	24	553	39	38	0	1	386	74	51	0	23
McNeese State U.	500	110	75	6	29	474	83	55	4	24	493	27	20	2	5
Bloomsburg U. Pennsylvania	501	109	55	0	54	487	76	22	0	54	476	33	33	0	0
Arkansas Tech U.	501	109	109	0	0	499	64	64	0	0	444	45	45	0	0
Quinnipiac U.	503	107	107	0	0	492	69	69	0	0	459	38	38	0	0
Wesleyan U.	504	105	105	0	0	446	105	105	0	0	618	0	0	0	0
Memorial Sloan Kettering Cancer Center	504	105	105	0	0	459	93	93	0	0	547	12	12	0	0
Northern Michigan U.	504	105	87	0	18	490	74	59	0	15	483	31	28	0	3
St. Mary's U., San Antonio	507	102	73	29	0	521	53	41	12	0	434	49	32	17	0
Southern U. and A&M C., New Orleans	508	101	101	0	0	509	59	59	0	0	449	42	42	0	0
U. Wisconsin-Green Bay	508	101	101	0	0	556	38	38	0	0	402	63	63	0	0
Salus U.	510	99	15	0	84	456	95	11	0	84	584	4	4	0	0
Canisius C.	510	99	83	0	16	526	50	40	0	10	434	49	43	0	6
Frostburg State U.	510	99	99	0	0	534	48	48	0	0	431	51	51	0	0
U. Guam	510	99	99	0	0	596	20	20	0	0	377	79	79	0	0
U. Hawaii, Hilo	514	98	96	0	2	496	65	65	0	0	476	33	31	0	2
New Jersey City U.	514	98	80	0	18	540	44	38	0	6	421	54	42	0	12
Millersville U. Pennsylvania	516	94	94	0	0	482	79	79	0	0	535	15	15	0	0
Worcester State U.	517	92	16	0	76	512	58	5	0	53	473	34	11	0	23
Bowie State U.	517	92	92	0	0	564	36	36	0	0	416	56	56	0	0
Clark Atlanta U.	519	91	91	0	0	512	58	58	0	0	476	33	33	0	0
City of Hope, Irell and Manella Graduate School of Biological Sciences	520	90	90	0	0	464	90	90	0	0	618	0	0	0	0
Inter American U. Puerto Rico, San German	520	90	90	0	0	503	61	61	0	0	491	29	29	0	0
Hawaii Pacific U.	520	90	61	0	29	507	60	39	0	21	487	30	22	0	8
Delaware State U.	523	88	78	0	10	473	84	74	0	10	584	4	4	0	0
American International C.	523	88	71	0	17	482	79	65	0	14	564	9	6	0	3

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Lindenwood U.	523	88	60	0	28	502	63	42	0	21	498	25	18	0	7
Western Colorado U.	523	88	84	0	4	503	61	57	0	4	493	27	27	0	0
Campbell U.	527	85	0	0	85	469	85	0	0	85	618	0	0	0	0
Wayland Baptist U.	527	85	85	0	0	524	52	52	0	0	476	33	33	0	0
Minnesota State U., Moorhead	529	83	34	0	49	484	78	30	0	48	578	5	4	0	1
U. Wisconsin-Oshkosh	530	82	82	0	0	613	14	14	0	0	395	68	68	0	0
Gallaudet U.	531	81	36	0	45	521	53	17	0	36	492	28	19	0	9
New Mexico Highlands U.	532	80	80	0	0	526	50	50	0	0	487	30	30	0	0
SUNY, C. Brockport	532	80	56	0	24	553	39	29	0	10	450	41	27	0	14
Vermont Technical C.	534	78	77	1	0	624	9	9	0	0	392	69	68	1	0
Texas A&M International U.	535	73	73	0	0	613	14	14	0	0	412	59	59	0	0
Cedars-Sinai Medical Center	536	72	72	0	0	534	48	48	0	0	502	24	24	0	0
Truman State U.	537	71	39	0	32	559	37	7	0	30	473	34	32	0	2
CUNY, C. Staten Island	537	71	62	9	0	601	19	18	1	0	428	52	44	8	0
Evergreen State C.	539	70	70	0	0	507	60	60	0	0	554	10	10	0	0
Mississippi U. for Women	539	70	7	0	63	509	59	1	0	58	551	11	6	0	5
Virginia State U.	539	70	70	0	0	526	50	50	0	0	516	20	20	0	0
DeSales U.	539	70	31	0	39	532	49	19	0	30	511	21	12	0	9
Widener U.	539	70	0	34	36	577	31	0	23	8	457	39	0	11	28
Charles R. Drew U. of Medicine and Science	544	69	33	0	36	494	68	32	0	36	609	1	1	0	0
Cooper Union for the Advancement of Science and Art	544	69	0	69	0	537	45	0	45	0	502	24	0	24	0
Roger Williams U.	546	67	67	0	0	536	47	47	0	0	516	20	20	0	0
Southern Nazarene U.	547	65	65	0	0	496	65	65	0	0	618	0	0	0	0
Mercyhurst U.	547	65	53	0	12	526	50	46	0	4	535	15	7	0	8
SUNY, C. Cortland	549	64	0	0	64	537	45	0	0	45	520	19	0	0	19
Des Moines U., Osteopathic Medical Center	550	63	29	0	34	584	26	20	0	6	464	37	9	0	28
Hampton U.	551	62	36	0	26	518	55	33	0	22	572	7	3	0	4
Springfield C.	551	62	37	0	25	518	55	32	0	23	572	7	5	0	2
Northeastern Ohio Universities, C. of Medicine	553	61	17	0	44	540	44	17	0	27	527	17	0	0	17
Fort Valley State U.	553	61	38	0	23	559	37	26	0	11	502	24	12	0	12
Oklahoma State U., Center for Health Sciences	555	60	27	0	33	559	37	9	0	28	506	23	18	0	5
California U. of Science and Medicine	556	59	59	0	0	509	59	59	0	0	618	0	0	0	0
U. Montevallo	557	58	0	0	58	514	57	0	0	57	609	1	0	0	1
SUNY, Fredonia	557	58	12	0	46	520	54	8	0	46	584	4	4	0	0
U. of the Incarnate Word	557	58	44	0	14	537	45	36	0	9	544	13	8	0	5

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Kettering U.	557	58	6	52	0	546	42	5	37	0	529	16	1	15	0
Cameron U.	561	57	57	0	0	596	20	20	0	0	464	37	37	0	0
Metropolitan State U.	561	57	57	0	0	634	7	7	0	0	433	50	50	0	0
Albany Medical C.	563	56	56	0	0	516	56	56	0	0	618	0	0	0	0
Coastal Carolina U.	563	56	56	0	0	602	18	18	0	0	459	38	38	0	0
California State U., Bakersfield	565	55	55	0	0	553	39	39	0	0	529	16	16	0	0
St. Thomas U.	566	54	51	0	3	526	50	47	0	3	584	4	4	0	0
Lake Erie C. Osteopathic Medicine	567	53	4	0	49	521	53	4	0	49	618	0	0	0	0
Plymouth State U.	567	53	39	0	14	556	38	31	0	7	535	15	8	0	7
Drew U.	567	53	23	0	30	581	28	20	0	8	498	25	3	0	22
Cold Spring Harbor Laboratory	570	51	51	0	0	525	51	51	0	0	618	0	0	0	0
Gonzaga U.	570	51	30	21	0	579	29	20	9	0	507	22	10	12	0
Van Andel Research Institute	572	50	50	0	0	526	50	50	0	0	618	0	0	0	0
Ithaca C.	572	50	50	0	0	549	40	40	0	0	554	10	10	0	0
U. West Alabama	572	50	50	0	0	549	40	40	0	0	554	10	10	0	0
Sanford-Burnham Medical Research Institute, La Jolla	575	49	49	0	0	532	49	49	0	0	618	0	0	0	0
U. of the Virgin Islands	575	49	49	0	0	540	44	44	0	0	578	5	5	0	0
SUNY, C. Plattsburgh	575	49	49	0	0	566	35	35	0	0	540	14	14	0	0
U. of Saint Mary	578	48	48	0	0	543	43	43	0	0	578	5	5	0	0
U. Arkansas, Pine Bluff	579	47	47	0	0	574	32	32	0	0	535	15	15	0	0
Georgia C. and State U.	580	46	24	0	22	574	32	22	0	10	540	14	2	0	12
South Carolina State U.	581	45	0	0	45	543	43	0	0	43	605	2	0	0	2
Delta State U.	582	44	44	0	0	594	23	23	0	0	511	21	21	0	0
Winthrop U.	583	43	43	0	0	549	40	40	0	0	598	3	3	0	0
Alfred U.	583	43	0	43	0	572	33	0	33	0	554	10	0	10	0
San Juan Bautista School of Medicine	585	41	0	0	41	548	41	0	0	41	618	0	0	0	0
Kentucky State U.	585	41	41	0	0	572	33	33	0	0	570	8	8	0	0
Florida Polytechnic U.	585	41	33	8	0	574	32	25	7	0	564	9	8	1	0
Oregon Institute of Technology	585	41	17	24	0	591	24	9	15	0	527	17	8	9	0
U. Wisconsin-Parkside	585	41	41	0	0	603	17	17	0	0	502	24	24	0	0
Wilkes U.	585	41	0	14	27	622	10	0	10	0	483	31	0	4	27
Bard C.	591	40	40	0	0	564	36	36	0	0	584	4	4	0	0
Inter American U. Puerto Rico, Fajardo	591	40	40	0	0	651	0	0	0	0	456	40	40	0	0
Louisiana State U., Shreveport	593	39	39	0	0	588	25	25	0	0	540	14	14	0	0
Christopher Newport U.	593	39	39	0	0	603	17	17	0	0	507	22	22	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Toyota Technological Institute, Chicago	595	38	38	0	0	556	38	38	0	0	618	0	0	0	0
Biola U.	595	38	38	0	0	566	35	35	0	0	598	3	3	0	0
American Museum of Natural History	597	37	37	0	0	559	37	37	0	0	618	0	0	0	0
Fisk U.	597	37	37	0	0	559	37	37	0	0	618	0	0	0	0
Bryn Mawr C.	597	37	37	0	0	566	35	35	0	0	605	2	2	0	0
Smith C.	597	37	8	0	29	582	27	0	0	27	554	10	8	0	2
Alabama State U.	601	36	36	0	0	603	17	17	0	0	520	19	19	0	0
Lincoln U.	602	35	35	0	0	612	15	15	0	0	516	20	20	0	0
U. of Mary Hardin Baylor	603	34	34	0	0	588	25	25	0	0	564	9	9	0	0
Northwestern State U. Louisiana	603	34	34	0	0	591	24	24	0	0	554	10	10	0	0
Loras C.	605	33	33	0	0	582	27	27	0	0	576	6	6	0	0
Milwaukee School of Engineering	605	33	0	33	0	603	17	0	17	0	529	16	0	16	0
Trinity C., Hartford	605	33	33	0	0	629	8	8	0	0	498	25	25	0	0
Xavier U.	605	33	16	0	17	644	3	3	0	0	487	30	13	0	17
Colorado State U., Pueblo	609	32	25	7	0	618	12	8	4	0	516	20	17	3	0
SUNY, C. of Optometry	610	31	31	0	0	616	13	13	0	0	525	18	18	0	0
Williams C.	611	30	30	0	0	578	30	30	0	0	618	0	0	0	0
Morehead State U.	611	30	30	0	0	603	17	17	0	0	544	13	13	0	0
Clafin U.	613	29	29	0	0	579	29	29	0	0	618	0	0	0	0
U. South Carolina, Aiken	613	29	29	0	0	584	26	26	0	0	598	3	3	0	0
Saint Martin's U.	613	29	12	17	0	588	25	10	15	0	584	4	2	2	0
Bethune-Cookman U.	613	29	29	0	0	596	20	20	0	0	564	9	9	0	0
U. Arkansas, Monticello	613	29	29	0	0	629	8	8	0	0	511	21	21	0	0
West Virginia State U.	618	27	27	0	0	584	26	26	0	0	609	1	1	0	0
Vanguard U.	619	26	26	0	0	584	26	26	0	0	618	0	0	0	0
Elizabeth City State U.	619	26	26	0	0	611	16	16	0	0	554	10	10	0	0
Kutztown U. Pennsylvania	619	26	26	0	0	619	11	11	0	0	535	15	15	0	0
Georgia Southwestern State U.	619	26	26	0	0	629	8	8	0	0	525	18	18	0	0
Rosalind Franklin U. of Medicine and Science	623	24	24	0	0	591	24	24	0	0	618	0	0	0	0
Bucknell U.	623	24	15	9	0	594	23	15	8	0	609	1	0	1	0
Savannah State U.	623	24	24	0	0	596	20	20	0	0	584	4	4	0	0
Aurora U.	623	24	0	0	24	616	13	0	0	13	551	11	0	0	11
SUNY, Oneonta	623	24	24	0	0	629	8	8	0	0	529	16	16	0	0
California State U., Stanislaus	628	23	23	0	0	619	11	11	0	0	547	12	12	0	0
Salisbury U.	629	21	21	0	0	603	17	17	0	0	584	4	4	0	0

TABLE 5-4a

Institutional rankings for graduate students: 2023

(Number)

Institution	All graduate students					Full-time students					Part-time students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
LeTourneau U.	629	21	13	8	0	624	9	1	8	0	547	12	12	0	0
New England C. of Optometry	631	20	20	0	0	596	20	20	0	0	618	0	0	0	0
Alaska Pacific U.	631	20	20	0	0	634	7	7	0	0	544	13	13	0	0
Mississippi Valley State U.	633	19	9	0	10	603	17	9	0	8	605	2	0	0	2
U. Central del Caribe	634	17	17	0	0	603	17	17	0	0	618	0	0	0	0
John Carroll U.	634	17	17	0	0	648	1	1	0	0	529	16	16	0	0
Montana State U., Billings	636	14	14	0	0	619	11	11	0	0	598	3	3	0	0
Pontifical Catholic U. Puerto Rico, Mayaguez	636	14	14	0	0	642	4	4	0	0	554	10	10	0	0
Winston-Salem State U.	638	13	13	0	0	624	9	9	0	0	584	4	4	0	0
Rhode Island C.	638	13	13	0	0	636	6	6	0	0	572	7	7	0	0
Marietta C.	640	11	11	0	0	629	8	8	0	0	598	3	3	0	0
Point Loma Nazarene U.	640	11	11	0	0	636	6	6	0	0	578	5	5	0	0
Elmezzi Graduate School of Molecular Medicine	642	10	10	0	0	622	10	10	0	0	618	0	0	0	0
Marshall B. Ketchum U.	642	10	10	0	0	624	9	9	0	0	609	1	1	0	0
U.S. Merchant Marine Academy	642	10	0	10	0	651	0	0	0	0	554	10	0	10	0
Walla Walla U.	645	9	9	0	0	651	0	0	0	0	564	9	9	0	0
U. Southern Maine	646	8	8	0	0	648	1	1	0	0	572	7	7	0	0
Southern Oregon U.	647	7	7	0	0	636	6	6	0	0	609	1	1	0	0
Albany C. of Pharmacy and Health Sciences	647	7	3	0	4	640	5	1	0	4	605	2	2	0	0
Rose-Hulman Institute of Technology	649	6	0	6	0	646	2	0	2	0	584	4	0	4	0
Black Hills State U.	650	5	5	0	0	640	5	5	0	0	618	0	0	0	0
Wagner C.	650	5	5	0	0	642	4	4	0	0	609	1	1	0	0
U. Portland	650	5	0	5	0	646	2	0	2	0	598	3	0	3	0
Pontifical Catholic U. Puerto Rico, Arecibo	650	5	5	0	0	648	1	1	0	0	584	4	4	0	0
Sitting Bull C.	654	4	4	0	0	651	0	0	0	0	584	4	4	0	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

Note(s):

Sorted by overall number of graduate students. Tied institutions are ranked first by number of full-time students and then alphabetically. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
All institutions ^a	-	510,866	348,520	100,567	61,779	-	329,971	222,976	65,160	41,835	-	180,895	125,544	35,407	19,944
Georgia Institute of Technology	1	13,382	11,245	2,087	50	15	3,005	1,614	1,370	21	1	10,377	9,631	717	29
Johns Hopkins U.	2	11,177	7,261	3,262	654	12	3,183	2,131	620	432	2	7,994	5,130	2,642	222
Arizona State U.	3	10,314	7,147	3,063	104	4	5,873	3,859	1,912	102	3	4,441	3,288	1,151	2
Northeastern U.	4	10,211	3,892	5,950	369	1	9,660	3,547	5,778	335	72	551	345	172	34
Columbia U. in the City of New York	5	8,722	5,731	2,246	745	5	5,773	4,026	1,124	623	5	2,949	1,705	1,122	122
U. Southern California	6	8,321	5,201	2,360	760	2	6,368	4,228	1,579	561	13	1,953	973	781	199
New York U.	7	8,073	6,084	1,514	475	3	6,287	4,523	1,386	378	15	1,786	1,561	128	97
U. North Texas, Denton	8	6,661	5,914	567	180	6	5,698	5,035	494	169	35	963	879	73	11
U. Michigan	9	6,512	3,303	2,748	461	7	5,017	2,620	1,953	444	23	1,495	683	795	17
U. Illinois, Urbana-Champaign	10	5,666	4,286	1,284	96	9	4,026	2,918	1,014	94	19	1,640	1,368	270	2
U. Florida	11	5,571	3,971	1,170	430	20	2,761	1,866	632	263	6	2,810	2,105	538	167
Purdue U.	12	4,746	1,410	3,082	254	31	2,216	950	1,123	143	7	2,530	460	1,959	111
George Washington U.	13	4,635	2,902	446	1,287	26	2,354	1,846	172	336	10	2,281	1,056	274	951
U. Washington	14	4,607	2,679	1,306	622	17	2,901	1,684	730	487	17	1,706	995	576	135
Liberty U.	15	4,539	3,869	14	656	34	2,087	1,767	11	309	8	2,452	2,102	3	347
Texas A&M U.	16	4,441	2,417	1,794	230	10	3,220	1,803	1,202	215	24	1,221	614	592	15
Carnegie Mellon U.	17	4,206	2,387	1,819	0	8	4,044	2,305	1,739	0	232	162	82	80	0
Boston U.	18	4,200	2,907	484	809	23	2,544	1,794	311	439	18	1,656	1,113	173	370
U. Texas, Arlington	19	4,036	2,729	1,260	47	14	3,007	2,143	836	28	33	1,029	586	424	19
George Mason U.	20	4,002	3,256	388	358	24	2,476	2,109	175	192	22	1,526	1,147	213	166
U. Cincinnati	21	3,915	2,442	546	927	43	1,871	1,296	285	290	12	2,044	1,146	261	637
U. Colorado	22	3,887	2,056	1,298	533	13	3,143	1,779	933	431	50	744	277	365	102
U. Texas, Dallas	23	3,820	3,075	546	199	16	2,946	2,417	335	194	44	874	658	211	5
Indiana U.	24	3,771	2,510	187	1,074	19	2,819	1,879	131	809	37	952	631	56	265
U. Central Missouri	25	3,760	3,589	95	76	11	3,218	3,056	90	72	77	542	533	5	4
National U.	26	3,714	3,513	0	201	41	1,948	1,826	0	122	16	1,766	1,687	0	79
SUNY, U. Buffalo	27	3,665	2,046	1,301	318	22	2,599	1,415	921	263	30	1,066	631	380	55
U. California, Berkeley	28	3,507	1,775	1,103	629	40	1,980	522	1,088	370	21	1,527	1,253	15	259
U. Maryland, U. C.	29	3,338	3,338	0	0	537	35	35	0	0	4	3,303	3,303	0	0
U. South Florida, Tampa	30	3,280	1,947	386	947	27	2,328	1,585	274	469	37	952	362	112	478
Pennsylvania State U.	31	3,262	1,976	1,164	122	53	1,398	818	468	112	14	1,864	1,158	696	10
North Carolina State U.	32	3,186	1,808	1,378	0	28	2,291	1,358	933	0	42	895	450	445	0
Lamar U.	33	3,167	2,573	351	243	36	2,059	1,608	298	153	28	1,108	965	53	90
Pepperdine U.	34	3,026	3,026	0	0	95	943	943	0	0	11	2,083	2,083	0	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Maryland, The	35	2,982	1,325	992	665	42	1,883	895	704	284	29	1,099	430	288	381
Stevens Institute of Technology	36	2,967	1,845	1,122	0	33	2,163	1,509	654	0	47	804	336	468	0
Illinois Institute of Technology	37	2,910	2,330	543	37	29	2,283	1,895	384	4	57	627	435	159	33
U. California, Los Angeles	38	2,872	1,190	1,255	427	18	2,872	1,190	1,255	427	611	0	0	0	0
Florida Institute of Technology	39	2,825	2,443	382	0	159	537	297	240	0	9	2,288	2,146	142	0
U. Chicago	40	2,818	2,794	24	0	30	2,252	2,234	18	0	67	566	560	6	0
Virginia Polytechnic Institute and State U.	41	2,761	1,665	1,027	69	47	1,710	896	754	60	32	1,051	769	273	9
Saint Louis U.	42	2,664	2,191	79	394	21	2,614	2,156	76	382	407	50	35	3	12
Stanford U.	43	2,652	1,439	1,066	147	25	2,402	1,338	944	120	168	250	101	122	27
U. Wisconsin-Madison	44	2,618	1,656	717	245	44	1,788	1,268	398	122	46	830	388	319	123
Georgetown U.	45	2,612	2,514	0	98	35	2,070	2,015	0	55	77	542	499	0	43
U. Minnesota	46	2,416	1,415	431	570	37	2,058	1,245	377	436	123	358	170	54	134
San Jose State U.	47	2,396	957	1,284	155	50	1,492	638	725	129	41	904	319	559	26
U. Central Florida	48	2,371	1,192	699	480	64	1,246	745	199	302	27	1,125	447	500	178
Texas Tech U.	49	2,338	1,650	448	240	45	1,720	1,248	282	190	60	618	402	166	50
Auburn U.	50	2,306	1,809	409	88	74	1,139	907	162	70	26	1,167	902	247	18
U. New Haven	51	2,288	1,207	1,060	21	38	2,025	1,052	952	21	160	263	155	108	0
U. California, San Diego	52	2,274	1,148	1,108	18	39	2,001	1,005	978	18	156	273	143	130	0
New Jersey Institute of Technology	53	2,259	1,614	599	46	48	1,636	1,266	334	36	59	623	348	265	10
Cornell U.	54	2,257	1,055	1,090	112	32	2,176	991	1,087	98	345	81	64	3	14
Colorado State U., Fort Collins	55	2,170	1,674	470	26	93	950	761	167	22	25	1,220	913	303	4
Florida State U.	56	2,163	1,687	236	240	69	1,184	928	132	124	34	979	759	104	116
Pace U.	57	2,004	1,949	27	28	46	1,711	1,670	18	23	149	293	279	9	5
Eastern U.	58	1,991	1,991	0	0	190	444	444	0	0	20	1,547	1,547	0	0
DePaul U.	59	1,942	1,629	65	248	49	1,537	1,270	43	224	109	405	359	22	24
U. Alabama, Birmingham	60	1,937	1,003	479	455	86	1,005	685	157	163	40	932	318	322	292
U. Arizona	61	1,933	1,207	357	369	109	867	527	139	201	30	1,066	680	218	168
Northwestern U.	62	1,923	1,366	364	193	57	1,296	897	287	112	57	627	469	77	81
U. Illinois, Chicago	63	1,921	676	405	840	52	1,413	524	290	599	90	508	152	115	241
U. North Carolina, Chapel Hill	64	1,910	478	14	1,418	54	1,388	428	14	946	87	522	50	0	472
Tufts U.	65	1,877	1,538	204	135	56	1,317	1,122	128	67	69	560	416	76	68
U. Houston	66	1,830	805	947	78	67	1,215	510	642	63	61	615	295	305	15
U. Utah	67	1,823	1,208	346	269	60	1,281	880	211	190	77	542	328	135	79
Syracuse U.	68	1,806	1,581	191	34	51	1,456	1,275	154	27	131	350	306	37	7
Drexel U.	69	1,799	1,345	301	153	111	847	660	121	66	37	952	685	180	87

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Denver	70	1,788	1,498	93	197	68	1,193	1,017	30	146	64	595	481	63	51
Oregon State U.	71	1,755	1,209	316	230	76	1,086	765	237	84	53	669	444	79	146
California State U., Northridge	72	1,699	513	391	795	125	742	275	221	246	36	957	238	170	549
U. Massachusetts, Amherst	73	1,652	1,134	231	287	76	1,086	840	155	91	67	566	294	76	196
U. Pittsburgh	74	1,636	1,027	275	334	75	1,105	731	161	213	85	531	296	114	121
Washington U., Saint Louis	75	1,633	852	566	215	59	1,284	693	408	183	132	349	159	158	32
U. Georgia	76	1,632	1,351	94	187	62	1,261	1,001	86	174	119	371	350	8	13
U. North Carolina, Charlotte	77	1,631	1,247	238	146	73	1,146	874	153	119	96	485	373	85	27
Columbia U., Teachers C.	78	1,622	1,474	0	148	55	1,360	1,247	0	113	161	262	227	0	35
Kennesaw State U.	79	1,613	1,141	349	123	112	844	704	115	25	49	769	437	234	98
California State U., Fullerton	80	1,607	986	465	156	122	755	491	128	136	45	852	495	337	20
Northern Arizona U.	81	1,591	1,324	53	214	81	1,042	898	42	102	73	549	426	11	112
Georgia State U.	82	1,567	1,134	44	389	60	1,281	961	43	277	150	286	173	1	112
Rutgers, State U. New Jersey	83	1,548	1,168	378	2	78	1,060	837	221	2	94	488	331	157	0
Florida Atlantic U.	84	1,541	1,229	195	117	71	1,159	942	132	85	117	382	287	63	32
U. Memphis	85	1,536	1,271	96	169	70	1,180	985	79	116	125	356	286	17	53
Florida International U.	86	1,526	997	212	317	84	1,026	692	132	202	92	500	305	80	115
California State U., Long Beach	87	1,519	1,014	342	163	92	961	666	190	105	70	558	348	152	58
Clemson U.	88	1,511	859	624	28	87	1,000	466	518	16	89	511	393	106	12
San Diego State U.	89	1,501	916	284	301	90	971	587	114	270	86	530	329	170	31
Ohio State U.	90	1,448	699	525	224	65	1,226	565	467	194	189	222	134	58	30
SUNY, U. Albany	91	1,443	1,146	56	241	80	1,048	884	42	122	112	395	262	14	119
Northwest Missouri State U.	92	1,381	1,381	0	0	118	770	770	0	0	62	611	611	0	0
Rochester Institute of Technology	93	1,377	1,068	293	16	85	1,022	825	196	1	126	355	243	97	15
Massachusetts Institute of Technology	94	1,358	531	827	0	58	1,285	530	755	0	362	73	1	72	0
U. Massachusetts, Lowell	95	1,349	688	492	169	156	547	296	163	88	48	802	392	329	81
SUNY, Stony Brook U.	96	1,337	885	274	178	72	1,147	778	218	151	212	190	107	56	27
Michigan State U.	97	1,334	836	209	289	134	621	373	93	155	51	713	463	116	134
U. Wisconsin-Milwaukee	98	1,331	1,021	75	235	89	977	726	48	203	127	354	295	27	32
U. Texas, San Antonio	99	1,328	1,036	206	86	131	658	528	75	55	52	670	508	131	31
U. Illinois, Springfield	100	1,327	1,181	0	146	113	830	740	0	90	93	497	441	0	56
Wichita State U.	101	1,326	960	315	51	96	929	701	178	50	111	397	259	137	1
Harrisburg U. of Science and Technology	102	1,298	1,216	0	82	63	1,247	1,169	0	78	404	51	47	0	4
Brown U.	102	1,298	1,007	212	79	66	1,217	940	198	79	345	81	67	14	0
American U.	104	1,292	1,272	0	20	121	760	753	0	7	84	532	519	0	13

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Case Western Reserve U.	105	1,261	671	336	254	94	948	479	254	215	142	313	192	82	39
U. Missouri, Kansas City	106	1,247	1,092	145	10	91	969	870	99	0	153	278	222	46	10
U. Bridgeport	107	1,233	1,014	92	127	88	997	864	80	53	177	236	150	12	74
Santa Clara U.	108	1,217	564	653	0	106	878	349	529	0	135	339	215	124	0
U. Connecticut	108	1,217	637	339	241	124	748	448	112	188	99	469	189	227	53
Harvard U.	110	1,212	416	176	620	107	871	294	170	407	133	341	122	6	213
Cleveland State U.	111	1,207	601	539	67	97	928	445	418	65	152	279	156	121	2
Prairie View A&M U.	112	1,184	1,028	156	0	123	751	628	123	0	102	433	400	33	0
U. Virginia	113	1,180	752	273	155	119	769	532	97	140	107	411	220	176	15
Central Michigan U.	114	1,174	1,041	16	117	83	1,030	917	5	108	253	144	124	11	9
Texas State U.	115	1,163	911	80	172	115	806	599	64	143	124	357	312	16	29
Naval Postgraduate School	116	1,144	479	665	0	119	769	476	293	0	118	375	3	372	0
Wright State U.	117	1,142	840	265	37	82	1,038	786	216	36	312	104	54	49	1
SUNY, Binghamton U.	118	1,140	780	290	70	99	918	661	226	31	189	222	119	64	39
U. Oklahoma	119	1,137	753	345	39	135	617	425	169	23	88	520	328	176	16
U. California, Davis	120	1,136	631	330	175	79	1,059	612	281	166	355	77	19	49	9
Rowan U.	121	1,133	829	193	111	110	859	603	159	97	155	274	226	34	14
U. Tennessee, Knoxville	122	1,112	580	345	187	148	569	295	186	88	76	543	285	159	99
Oklahoma State U.	123	1,107	693	266	148	115	806	542	155	109	144	301	151	111	39
California Baptist U.	124	1,078	852	5	221	114	826	672	0	154	167	252	180	5	67
Kent State U.	125	1,076	705	29	342	126	716	522	26	168	121	360	183	3	174
Northern Illinois U.	126	1,075	675	153	247	128	688	531	79	78	115	387	144	74	169
U. West Florida	127	1,067	873	53	141	330	182	140	7	35	43	885	733	46	106
Long Island U.	128	1,065	640	1	424	101	900	543	0	357	229	165	97	1	67
Wayne State U.	129	1,064	550	213	301	145	576	283	103	190	94	488	267	110	111
Worcester Polytechnic Institute	130	1,060	414	646	0	197	429	229	200	0	56	631	185	446	0
U. California, Irvine	131	1,059	532	527	0	103	898	438	460	0	234	161	94	67	0
Mississippi State U.	131	1,059	683	331	45	154	551	371	139	41	90	508	312	192	4
Antioch U.	133	1,056	1,056	0	0	98	919	919	0	0	262	137	137	0	0
U. Dayton	133	1,056	651	405	0	102	899	577	322	0	240	157	74	83	0
U. Miami	135	1,053	850	115	88	105	886	743	95	48	227	167	107	20	40
U. Texas Health Science Center, Houston	136	1,048	375	5	668	166	500	242	4	254	74	548	133	1	414
U. San Francisco	137	1,041	950	0	91	136	608	581	0	27	102	433	369	0	64
Old Dominion U.	138	1,028	516	451	61	215	385	272	58	55	54	643	244	393	6
U. Delaware	139	1,022	781	170	71	117	798	589	143	66	187	224	192	27	5

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Troy U.	140	1,021	1,000	0	21	212	387	376	0	11	55	634	624	0	10
Clark U.	141	1,016	1,016	0	0	103	898	898	0	0	293	118	118	0	0
U. Missouri, Columbia	142	1,007	665	72	270	180	474	289	33	152	83	533	376	39	118
Maharishi U. of Management	143	1,002	1,002	0	0	108	870	870	0	0	271	132	132	0	0
U. New Mexico	144	967	433	364	170	140	600	283	215	102	120	367	150	149	68
Southern Methodist U.	145	957	568	389	0	229	353	245	108	0	63	604	323	281	0
Southern Arkansas U.	146	954	954	0	0	205	398	398	0	0	71	556	556	0	0
Kansas State U.	147	949	728	117	104	163	517	410	55	52	104	432	318	62	52
U. Massachusetts, Boston	148	947	819	0	128	143	588	563	0	25	122	359	256	0	103
Utah State U.	149	943	571	190	182	201	407	180	108	119	82	536	391	82	63
Miami U.	150	930	802	38	90	239	335	211	38	86	64	595	591	0	4
Ohio U.	151	929	583	155	191	188	454	325	49	80	97	475	258	106	111
U. Texas Rio Grande Valley	152	919	484	124	311	218	381	257	81	43	80	538	227	43	268
Duke U.	153	907	608	261	38	100	907	608	261	38	611	0	0	0	0
New Mexico State U.	153	907	577	184	146	164	514	355	85	74	113	393	222	99	72
U. Louisville	155	906	189	469	248	189	448	99	134	215	100	458	90	335	33
Lewis U.	156	890	809	7	74	130	661	583	7	71	181	229	226	0	3
Missouri State U.	157	889	591	0	298	155	548	366	0	182	133	341	225	0	116
U. Kentucky	158	881	518	126	237	129	682	397	95	190	203	199	121	31	47
California State U., Sacramento	158	881	531	218	132	233	344	168	73	103	81	537	363	145	29
Iowa State U.	160	874	636	234	4	199	417	297	116	4	101	457	339	118	0
U. Maryland, Baltimore County	161	869	772	97	0	144	585	531	54	0	151	284	241	43	0
California State Polytechnic U., Pomona	162	867	497	370	0	142	594	390	204	0	156	273	107	166	0
Southeast Missouri State U.	163	864	822	0	42	127	703	668	0	35	234	161	154	0	7
U. Kansas	164	859	538	171	150	157	544	318	123	103	141	315	220	48	47
Colorado School of Mines	165	843	302	541	0	138	605	242	363	0	176	238	60	178	0
California State U., Los Angeles	166	817	603	165	49	185	463	368	64	31	127	354	235	101	18
U. Houston-Clear Lake	167	816	692	109	15	184	465	422	41	2	130	351	270	68	13
Rice U.	168	807	624	183	0	158	540	372	168	0	159	267	252	15	0
Texas Woman's U.	169	801	574	0	227	207	394	207	0	187	108	407	367	0	40
Tulane U.	170	799	335	17	447	133	626	299	17	310	225	173	36	0	137
Temple U.	170	799	585	61	153	167	499	358	26	115	145	300	227	35	38
Southern Illinois U., Edwardsville	170	799	389	353	57	183	471	189	227	55	136	328	200	126	2
U. Nebraska-Lincoln	173	798	525	213	60	177	480	297	126	57	137	318	228	87	3
Missouri U. of Science and Technology	174	795	432	363	0	162	523	344	179	0	158	272	88	184	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. San Diego	174	795	620	62	113	286	251	235	0	16	75	544	385	62	97
U. Hawaii, Manoa	176	793	474	160	159	139	601	369	128	104	210	192	105	32	55
Grand Valley State U.	177	791	569	66	156	141	596	424	33	139	206	195	145	33	17
Michigan Technological U.	178	782	283	419	80	150	567	207	294	66	195	215	76	125	14
U. North Carolina, Greensboro	179	780	535	0	245	173	483	284	0	199	147	297	251	0	46
U. Massachusetts, Dartmouth	180	779	669	110	0	153	553	493	60	0	184	226	176	50	0
Georgia Southern U.	181	773	376	111	286	161	529	253	74	202	170	244	123	37	84
West Virginia U.	182	762	362	193	207	146	573	264	136	173	215	189	98	57	34
Western Illinois U.	183	751	699	0	52	137	607	560	0	47	253	144	139	0	5
Texas A&M U.-Kingsville	184	750	469	189	92	147	571	386	120	65	222	179	83	69	27
U. Texas, El Paso	184	750	313	326	111	187	456	197	179	80	148	294	116	147	31
U. Alabama, Tuscaloosa	186	747	339	221	187	196	431	220	80	131	140	316	119	141	56
Baylor U.	187	744	261	17	466	165	505	155	14	336	174	239	106	3	130
Eastern Washington U.	188	740	254	0	486	132	629	212	0	417	304	111	42	0	69
Sam Houston State U.	189	739	643	0	96	232	348	302	0	46	114	391	341	0	50
Louisiana State U.	190	736	399	217	120	172	489	315	82	92	169	247	84	135	28
U. Alabama, Huntsville	191	730	305	425	0	283	257	174	83	0	98	473	131	342	0
U. California, Riverside	192	726	399	327	0	149	568	386	182	0	239	158	13	145	0
CUNY, Baruch C.	193	724	674	50	0	380	136	128	8	0	66	588	546	42	0
U. South Carolina	194	716	315	106	295	182	473	238	76	159	172	243	77	30	136
Texas A&M U.-Commerce	195	715	630	0	85	271	284	270	0	14	105	431	360	0	71
U. Nevada, Reno	196	709	348	168	193	176	481	221	142	118	183	228	127	26	75
U. Nebraska, Omaha	197	708	708	0	0	248	324	324	0	0	116	384	384	0	0
U. Idaho	198	687	557	130	0	270	285	242	43	0	110	402	315	87	0
Portland State U.	199	684	523	77	84	198	426	326	32	68	164	258	197	45	16
Ball State U.	200	670	594	0	76	230	352	286	0	66	137	318	308	0	10
St. Cloud State U.	201	654	389	172	93	168	497	301	109	87	240	157	88	63	6
California State U., San Bernardino	202	648	623	0	25	152	565	540	0	25	342	83	83	0	0
Yeshiva U.	203	647	449	0	198	175	482	315	0	167	229	165	134	0	31
Brigham Young U.	204	645	360	194	91	241	328	188	76	64	139	317	172	118	27
Western Michigan U.	205	636	452	105	79	151	566	405	90	71	366	70	47	15	8
National Louis U.	206	632	632	0	0	173	483	483	0	0	246	149	149	0	0
California Institute of Integral Studies	207	631	631	0	0	170	492	492	0	0	260	139	139	0	0
U. Rhode Island	208	623	346	113	164	211	389	215	62	112	179	234	131	51	52
East Carolina U.	208	623	332	31	260	224	362	194	13	155	162	261	138	18	105

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Arkansas, Fayetteville	210	617	285	261	71	249	313	144	102	67	143	304	141	159	4
U. New Hampshire	211	608	441	83	84	180	474	347	54	73	266	134	94	29	11
Towson U.	212	600	493	0	107	213	386	280	0	106	196	214	213	0	1
Southern Illinois U., Carbondale	213	592	364	98	130	170	492	302	77	113	316	100	62	21	17
U. North Dakota	214	583	393	128	62	295	231	133	43	55	129	352	260	85	7
California State U., Fresno	215	579	404	62	113	222	365	219	42	104	196	214	185	20	9
Barry U.	216	578	518	0	60	215	385	332	0	53	208	193	186	0	7
Illinois State U.	217	576	488	0	88	178	478	392	0	86	319	98	96	0	2
Brandeis U.	218	575	572	0	3	190	444	443	0	1	273	131	129	0	2
U. Maine	218	575	392	144	39	192	442	295	108	39	269	133	97	36	0
New York Institute of Technology	220	574	468	82	24	195	432	368	51	13	256	142	100	31	11
U. of the Pacific	221	561	426	36	99	194	433	312	34	87	276	128	114	2	12
U. Toledo	222	555	304	120	131	220	368	221	55	92	217	187	83	65	39
Azusa Pacific U.	223	554	523	0	31	204	399	375	0	24	244	155	148	0	7
U. Northern Colorado	224	548	380	0	168	269	290	178	0	112	164	258	202	0	56
U. Puerto Rico, Mayaguez	225	546	381	142	23	169	496	361	124	11	407	50	20	18	12
Texas A&M U.-Corpus Christi	225	546	486	18	42	186	462	436	13	13	340	84	50	5	29
East Tennessee State U.	225	546	218	0	328	233	344	150	0	194	202	202	68	0	134
Rush U.	228	544	79	0	465	179	476	70	0	406	373	68	9	0	59
Oakland U.	229	538	231	229	78	250	312	161	98	53	184	226	70	131	25
U. California, Santa Barbara	230	534	410	124	0	160	534	410	124	0	611	0	0	0	0
U. Nevada, Las Vegas	231	532	281	95	156	251	310	152	55	103	189	222	129	40	53
New School	232	531	531	0	0	193	441	441	0	0	328	90	90	0	0
Loyola U., Chicago	233	527	410	20	97	207	394	335	11	48	269	133	75	9	49
Regis U.	233	527	520	0	7	221	366	364	0	2	234	161	156	0	5
San Francisco State U.	233	527	482	45	0	238	337	308	29	0	212	190	174	16	0
Governors State U.	236	524	336	0	188	217	382	244	0	138	256	142	92	0	50
U. Texas, Tyler	237	521	342	69	110	265	295	198	45	52	184	226	144	24	58
Saint Mary's U. Minnesota	238	519	483	0	36	207	394	362	0	32	279	125	121	0	4
Washington State U.	239	511	347	112	52	213	386	262	72	52	279	125	85	40	0
Boston C.	240	509	509	0	0	200	414	414	0	0	322	95	95	0	0
North Dakota State U.	241	504	372	108	24	251	310	238	55	17	207	194	134	53	7
Roosevelt U.	242	500	500	0	0	206	395	395	0	0	309	105	105	0	0
Clarion U. Pennsylvania	243	498	195	0	303	285	254	50	0	204	170	244	145	0	99
Villanova U.	244	491	221	270	0	260	301	169	132	0	212	190	52	138	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. South Dakota	245	486	360	2	124	223	363	273	1	89	284	123	87	1	35
Marshall U.	245	486	316	22	148	226	358	206	14	138	276	128	110	8	10
U. New England	245	486	301	0	185	236	341	247	0	94	251	145	54	0	91
U. Wyoming	248	479	300	70	109	235	342	222	54	66	262	137	78	16	43
Eastern Michigan U.	248	479	356	0	123	313	203	132	0	71	154	276	224	0	52
Fairleigh Dickinson U.	250	477	448	3	26	240	331	316	2	13	250	146	132	1	13
CUNY, Queens C.	251	471	402	0	69	274	275	218	0	57	205	196	184	0	12
Virginia Commonwealth U.	252	467	331	85	51	279	264	191	33	40	201	203	140	52	11
California State U., East Bay	253	466	384	0	82	225	360	280	0	80	306	106	104	0	2
Middle Tennessee State U.	254	462	429	0	33	291	239	217	0	22	188	223	212	0	11
Adelphi U.	255	457	248	0	209	241	328	191	0	137	275	129	57	0	72
West Chester U. Pennsylvania	255	457	273	0	184	279	264	140	0	124	208	193	133	0	60
CUNY, City C.	255	457	345	112	0	297	228	164	64	0	181	229	181	48	0
Lawrence Technological U.	258	455	184	271	0	514	42	9	33	0	106	413	175	238	0
South Dakota State U.	259	453	352	90	11	258	302	232	65	5	245	151	120	25	6
U. Iowa	260	450	208	71	171	203	404	190	56	158	419	46	18	15	13
Gannon U.	261	439	364	75	0	210	392	325	67	0	415	47	39	8	0
Montana State U.	261	439	337	102	0	243	327	246	81	0	303	112	91	21	0
Lehigh U.	263	437	215	217	5	262	298	175	118	5	260	139	40	99	0
U. Southern Mississippi	264	431	296	2	133	231	349	242	1	106	344	82	54	1	27
Bowling Green State U.	265	423	295	67	61	253	309	194	55	60	300	114	101	12	1
U. California, Santa Cruz	266	422	377	45	0	201	407	368	39	0	519	15	9	6	0
Murray State U.	267	420	375	0	45	227	355	310	0	45	375	65	65	0	0
Idaho State U.	268	416	208	50	158	297	228	125	32	71	216	188	83	18	87
Hofstra U.	269	414	226	0	188	243	327	171	0	156	335	87	55	0	32
Angelo State U.	269	414	399	0	15	339	175	166	0	9	174	239	233	0	6
Nova Southeastern U.	271	413	379	0	34	333	180	166	0	14	180	233	213	0	20
California State U., Chico	272	407	324	0	83	286	251	177	0	74	243	156	147	0	9
Vanderbilt U.	273	406	368	38	0	255	308	272	36	0	319	98	96	2	0
Touro C.	274	404	314	0	90	245	326	237	0	89	354	78	77	0	1
California Polytechnic State U., San Luis Obispo	274	404	223	181	0	262	298	155	143	0	306	106	68	38	0
Indiana Institute of Technology	276	401	398	0	3	227	355	352	0	3	419	46	46	0	0
U. Central Oklahoma	277	398	329	10	59	257	303	258	3	42	322	95	71	7	17
Eastern Kentucky U.	278	396	273	0	123	333	180	76	0	104	194	216	197	0	19
Southern Connecticut State U.	279	390	190	9	191	297	228	81	6	141	232	162	109	3	50

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Marquette U.	280	387	171	75	141	296	230	79	39	112	240	157	92	36	29
Western Kentucky U.	281	385	162	0	223	278	272	90	0	182	302	113	72	0	41
U. North Carolina, Wilmington	282	384	384	0	0	245	326	326	0	0	387	58	58	0	0
U. North Texas, Health Science Center	283	383	382	0	1	236	341	340	0	1	427	42	42	0	0
Dartmouth C.	284	381	118	154	109	219	375	114	152	109	566	6	4	2	0
Appalachian State U.	285	377	274	0	103	268	291	189	0	102	336	86	85	0	1
U. Vermont	286	372	193	57	122	292	238	133	44	61	266	134	60	13	61
Seattle U.	286	372	348	24	0	331	181	179	2	0	211	191	169	22	0
Columbus State U.	288	371	360	10	1	401	114	109	5	0	166	257	251	5	1
CUNY, Graduate Center	288	371	371	0	0	404	110	110	0	0	162	261	261	0	0
U. Louisiana, Lafayette	290	369	252	60	57	253	309	204	49	56	385	60	48	11	1
U. Arkansas, Little Rock	290	369	351	9	9	281	263	254	6	3	306	106	97	3	6
U. Montana	292	365	226	0	139	303	220	135	0	85	251	145	91	0	54
Kean U.	293	364	224	0	140	273	278	169	0	109	336	86	55	0	31
CUNY, John Jay C. of Criminal Justice	293	364	364	0	0	360	154	154	0	0	200	210	210	0	0
Texas A&M U., San Antonio	295	363	347	0	16	375	142	142	0	0	192	221	205	0	16
Marymount U.	296	362	348	0	14	267	292	284	0	8	366	70	64	0	6
North Carolina Central U.	297	351	239	0	112	288	248	138	0	110	313	103	101	0	2
SUNY, Downstate Health Sciences U.	297	351	11	0	340	337	177	10	0	167	224	174	1	0	173
U. Puerto Rico, Medical Sciences Campus	299	349	84	0	265	255	308	73	0	235	429	41	11	0	30
St. John's U., Queens	300	346	237	0	109	272	282	176	0	106	379	64	61	0	3
Eastern Illinois U.	301	340	244	0	96	308	209	124	0	85	273	131	120	0	11
North Carolina Agricultural and Technical State U.	302	339	175	164	0	282	262	141	121	0	355	77	34	43	0
Bradley U.	303	336	214	122	0	264	297	194	103	0	438	39	20	19	0
Western Washington U.	303	336	279	0	57	284	255	206	0	49	345	81	73	0	8
California State U., San Marcos	305	335	213	0	122	289	245	143	0	102	328	90	70	0	20
Endicott C.	305	335	335	0	0	531	37	37	0	0	146	298	298	0	0
Clarkson U.	307	334	158	176	0	310	207	132	75	0	278	127	26	101	0
U. Rochester	308	330	225	63	42	294	232	164	60	8	319	98	61	3	34
Yale U.	309	327	164	21	142	247	325	162	21	142	596	2	2	0	0
U. Puerto Rico, Rio Piedras	310	326	326	0	0	310	207	207	0	0	291	119	119	0	0
Boise State U.	310	326	204	74	48	327	183	124	29	30	255	143	80	45	18
Southern U.	312	325	251	29	45	316	201	135	21	45	283	124	116	8	0
Embry-Riddle Aeronautical U.	313	323	110	213	0	258	302	101	201	0	492	21	9	12	0
U. Oregon	314	322	250	0	72	274	275	204	0	71	415	47	46	0	1

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. South Alabama	315	320	202	66	52	266	294	188	54	52	476	26	14	12	0
CUNY, Brooklyn C.	316	319	233	0	86	407	108	52	0	56	198	211	181	0	30
U. Akron	317	317	157	60	100	307	216	113	32	71	315	101	44	28	29
U. North Florida	317	317	198	33	86	323	192	111	16	65	279	125	87	17	21
Northern Kentucky U.	319	314	130	0	184	460	73	35	0	38	173	241	95	0	146
U. Mississippi	320	311	158	23	130	274	275	126	23	126	444	36	32	0	4
Claremont Graduate U.	320	311	225	0	86	402	113	99	0	14	204	198	126	0	72
Valparaiso U.	322	306	304	0	2	324	191	190	0	1	298	115	114	0	1
U. Alaska, Fairbanks	322	306	267	39	0	388	125	100	25	0	221	181	167	14	0
Philadelphia C. of Osteopathic Medicine	324	300	300	0	0	277	273	273	0	0	472	27	27	0	0
Princeton U.	325	299	269	30	0	261	299	269	30	0	611	0	0	0	0
SUNY, Polytechnic Institute	325	299	239	10	50	327	183	161	0	22	296	116	78	10	28
Midwestern State U.	327	292	292	0	0	325	187	187	0	0	309	105	105	0	0
Augusta U.	328	291	183	0	108	385	131	100	0	31	238	160	83	0	77
Robert Morris U.	329	290	275	0	15	290	240	240	0	0	407	50	35	0	15
A. T. Still U.	330	289	55	0	234	347	168	47	0	121	289	121	8	0	113
Polytechnic U. Puerto Rico	330	289	72	217	0	349	167	40	127	0	287	122	32	90	0
Minnesota State U., Mankato	332	288	172	27	89	366	151	76	10	65	262	137	96	17	24
Central Connecticut State U.	333	287	266	21	0	421	100	94	6	0	217	187	172	15	0
New York Medical C.	334	286	154	0	132	318	198	114	0	84	333	88	40	0	48
Sage Colleges	334	286	286	0	0	457	75	75	0	0	198	211	211	0	0
Inter American U. Puerto Rico, Metro	336	283	215	0	68	305	218	171	0	47	375	65	44	0	21
James Madison U.	337	279	168	0	111	357	158	126	0	32	289	121	42	0	79
Northeastern Illinois U.	337	279	216	0	63	427	93	71	0	22	219	186	145	0	41
California State U., Dominguez Hills	339	278	278	0	0	301	224	224	0	0	396	54	54	0	0
Jacksonville U.	339	278	99	0	179	308	209	36	0	173	371	69	63	0	6
Stephen F. Austin State U.	341	276	197	0	79	338	176	101	0	75	316	100	96	0	4
Fitchburg State U.	342	275	275	0	0	293	234	234	0	0	429	41	41	0	0
Alabama A&M U.	342	275	126	84	65	353	165	72	43	50	305	110	54	41	15
Tennessee State U.	344	273	149	44	80	341	174	98	35	41	318	99	51	9	39
Indiana U. Pennsylvania	344	273	200	0	73	345	170	102	0	68	313	103	98	0	5
Mercer U.	346	271	58	115	98	377	139	49	28	62	271	132	9	87	36
Northeastern State U.	347	270	194	0	76	339	175	114	0	61	322	95	80	0	15
U. Louisiana, Monroe	347	270	197	0	73	360	154	109	0	45	296	116	88	0	28
U. of Saint Joseph	349	269	253	0	16	429	91	82	0	9	223	178	171	0	7

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Baltimore	350	268	268	0	0	424	95	95	0	0	225	173	173	0	0
Seton Hall U.	351	266	194	0	72	331	181	109	0	72	339	85	85	0	0
U. Notre Dame	352	264	156	108	0	317	200	95	105	0	379	64	61	3	0
U. Nebraska, Kearney	353	263	154	0	109	448	80	21	0	59	220	183	133	0	50
Benedictine U.	354	261	96	0	165	424	95	60	0	35	228	166	36	0	130
Saint Joseph's U.	354	261	219	0	42	508	44	36	0	8	193	217	183	0	34
Rensselaer Polytechnic Institute	356	255	105	150	0	313	203	95	108	0	401	52	10	42	0
U. Hartford	357	254	194	60	0	412	105	84	21	0	246	149	110	39	0
Central Washington U.	358	252	235	0	17	351	166	157	0	9	336	86	78	0	8
William Paterson U.	359	250	128	0	122	344	171	89	0	82	351	79	39	0	40
Simmons U.	359	250	226	0	24	589	14	10	0	4	177	236	216	0	20
U. Tennessee, Chattanooga	361	249	152	50	47	326	185	119	27	39	379	64	33	23	8
Austin Peay State U.	361	249	223	0	26	407	108	82	0	26	258	141	141	0	0
Emporia State U.	361	249	249	0	0	407	108	108	0	0	258	141	141	0	0
William and Mary	364	243	243	0	0	319	195	195	0	0	413	48	48	0	0
California State Polytechnic U., Humboldt	364	243	238	5	0	342	173	168	5	0	366	70	70	0	0
Oregon Health and Science U.	364	243	65	1	177	388	125	35	0	90	293	118	30	1	87
Loyola U., Maryland	367	240	151	0	89	349	167	78	0	89	362	73	73	0	0
Loyola Marymount U.	368	235	132	99	4	320	194	123	69	2	429	41	9	30	2
Chapman U.	368	235	132	0	103	333	180	78	0	102	392	55	54	0	1
Eastern Virginia Medical School	368	235	39	0	196	371	145	39	0	106	328	90	0	0	90
U. Northern Iowa	371	233	117	0	116	362	153	40	0	113	349	80	77	0	3
Massachusetts C. of Pharmacy and Health Sciences	371	233	5	0	228	372	144	5	0	139	332	89	0	0	89
U. Wisconsin-La Crosse	371	233	209	12	12	463	69	54	5	10	231	164	155	7	2
Wake Forest U.	374	232	171	15	46	302	223	170	14	39	553	9	1	1	7
Eastern New Mexico U.	374	232	101	0	131	362	153	65	0	88	351	79	36	0	43
Midwestern U.	376	230	230	0	0	305	218	218	0	0	534	12	12	0	0
Southeastern Louisiana U.	377	229	104	0	125	327	183	78	0	105	419	46	26	0	20
Chicago State U.	378	228	219	0	9	381	135	129	0	6	326	93	90	0	3
Touro U., Vallejo	379	227	0	0	227	304	219	0	0	219	561	8	0	0	8
Oklahoma City U.	379	227	197	0	30	343	172	170	0	2	392	55	27	0	28
Hood C.	379	227	227	0	0	412	105	105	0	0	287	122	122	0	0
Uniformed Services U. of the Health Sciences	382	225	0	0	225	300	225	0	0	225	611	0	0	0	0
U. Tulsa	383	224	134	55	35	313	203	115	53	35	492	21	19	2	0
Dakota State U.	383	224	204	0	20	362	153	144	0	9	365	71	60	0	11

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Fordham U.	385	219	219	0	0	347	168	168	0	0	404	51	51	0	0
Indiana State U.	385	219	175	0	44	377	139	96	0	43	349	80	79	0	1
Citadel Military C. South Carolina	387	218	164	40	14	485	57	43	8	6	234	161	121	32	8
Morehouse School of Medicine	388	212	94	0	118	322	193	79	0	114	501	19	15	0	4
Keck Graduate Institute	389	210	130	31	49	310	207	127	31	49	590	3	3	0	0
U. West Georgia	390	207	144	0	63	460	73	41	0	32	266	134	103	0	31
U. Wisconsin-Eau Claire	391	205	100	0	105	444	82	23	0	59	284	123	77	0	46
SUNY, New Paltz	392	204	138	8	58	351	166	106	5	55	439	38	32	3	3
Oklahoma Christian U.	393	201	0	201	0	358	156	0	156	0	424	45	0	45	0
Loma Linda U.	394	197	64	0	133	346	169	54	0	115	468	28	10	0	18
Valdosta State U.	394	197	83	0	114	354	162	48	0	114	447	35	35	0	0
U. Central Arkansas	394	197	89	0	108	388	125	35	0	90	364	72	54	0	18
Pontifical Catholic U. Puerto Rico	394	197	197	0	0	419	103	103	0	0	325	94	94	0	0
Calvin U.	398	196	13	0	183	393	119	5	0	114	355	77	8	0	69
U. Houston-Victoria	398	196	196	0	0	447	81	81	0	0	298	115	115	0	0
U. Texas Medical Branch	398	196	189	0	7	499	48	45	0	3	248	148	144	0	4
New Mexico Institute of Mining and Technology	401	195	62	133	0	376	141	53	88	0	396	54	9	45	0
Meharry Medical C.	402	194	165	0	29	320	194	165	0	29	611	0	0	0	0
South Dakota School of Mines and Technology	403	191	35	156	0	366	151	32	119	0	434	40	3	37	0
U. North Alabama	404	190	143	31	16	488	53	38	3	12	262	137	105	28	4
La Salle U.	405	188	137	0	51	365	152	102	0	50	444	36	35	0	1
Kansas City U. of Medicine and Biosciences	406	187	118	0	69	336	178	113	0	65	553	9	5	0	4
U. Arkansas for Medical Sciences	406	187	40	0	147	423	97	20	0	77	328	90	20	0	70
Arkansas State U.	408	186	102	20	64	412	105	39	7	59	345	81	63	13	5
Morgan State U.	409	185	90	40	55	356	159	77	34	48	476	26	13	6	7
Tennessee Technological U.	410	184	111	73	0	468	66	41	25	0	293	118	70	48	0
California State U., Monterey Bay	411	180	105	0	75	369	148	75	0	73	455	32	30	0	2
West Texas A&M U.	411	180	89	30	61	417	104	45	8	51	359	76	44	22	10
Youngstown State U.	413	178	94	84	0	370	147	78	69	0	458	31	16	15	0
Fort Hays State U.	414	175	139	0	36	373	143	108	0	35	455	32	31	0	1
Monmouth U.	415	174	84	6	84	399	116	30	2	84	387	58	54	4	0
Weber State U.	415	174	57	27	90	406	109	24	2	83	375	65	33	25	7
Chatham U.	417	169	169	0	0	381	135	135	0	0	448	34	34	0	0
Manhattan C.	417	169	0	169	0	387	128	0	128	0	429	41	0	41	0
U. Missouri, Saint Louis	417	169	169	0	0	472	64	64	0	0	309	105	105	0	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Texas Health Science Center, San Antonio	420	168	50	12	106	368	149	47	0	102	501	19	3	12	4
Louisiana Tech U.	421	166	91	25	50	379	138	72	18	48	468	28	19	7	2
C. Charleston	421	166	166	0	0	444	82	82	0	0	340	84	84	0	0
Salem State U.	423	165	165	0	0	454	77	77	0	0	333	88	88	0	0
SUNY, C. of Environmental Science and Forestry	424	164	140	24	0	381	135	115	20	0	465	29	25	4	0
California Lutheran U.	425	162	162	0	0	373	143	143	0	0	501	19	19	0	0
Florida A&M U.	425	162	150	12	0	393	119	111	8	0	426	43	39	4	0
U. New Orleans	425	162	111	51	0	434	87	67	20	0	360	75	44	31	0
U. California, San Francisco	428	161	0	16	145	355	161	0	16	145	611	0	0	0	0
Stockton U.	428	161	95	0	66	412	105	43	0	62	390	56	52	0	4
CUNY, Lehman C.	430	159	34	0	125	541	34	24	0	10	279	125	10	0	115
Howard U.	431	158	105	9	44	397	118	70	7	41	434	40	35	2	3
Texas Christian U.	432	156	101	0	55	359	155	100	0	55	602	1	1	0	0
Avila U.	433	155	145	0	10	384	133	123	0	10	488	22	22	0	0
Montana Tech of U. Montana	434	154	22	47	85	519	40	9	22	9	300	114	13	25	76
Framingham State U.	434	154	154	0	0	617	6	6	0	0	248	148	148	0	0
Texas Southern U.	436	153	152	0	1	393	119	118	0	1	448	34	34	0	0
SUNY, Buffalo State	437	152	106	4	42	429	91	50	1	40	384	61	56	3	2
U. Texas of the Permian Basin	438	151	142	6	3	417	104	97	4	3	415	47	45	2	0
Western Carolina U.	439	148	85	0	63	386	129	67	0	62	501	19	18	0	1
Bridgewater State U.	440	144	113	0	31	422	98	67	0	31	419	46	46	0	0
U. Indianapolis	441	143	107	0	36	419	103	75	0	28	434	40	32	0	8
Dominican U. California	442	141	141	0	0	404	110	110	0	0	458	31	31	0	0
Norfolk State U.	442	141	106	35	0	434	87	63	24	0	396	54	43	11	0
Iona C.	444	140	75	0	65	393	119	56	0	63	492	21	19	0	2
U. Alaska, Anchorage	444	140	80	22	38	499	48	39	1	8	327	92	41	21	30
Mississippi C.	446	138	138	0	0	402	113	113	0	0	479	25	25	0	0
U. Michigan, Flint	446	138	115	3	20	440	83	71	0	12	392	55	44	3	8
U. Detroit Mercy	446	138	35	89	14	465	68	16	38	14	366	70	19	51	0
Niagara U.	449	136	136	0	0	433	88	88	0	0	413	48	48	0	0
Sonoma State U.	449	136	114	22	0	440	83	73	10	0	400	53	41	12	0
Pittsburg State U.	451	133	117	0	16	410	107	107	0	0	476	26	10	0	16
U. of the District of Columbia	451	133	80	27	26	412	105	61	21	23	468	28	19	6	3
U. Wisconsin-Stevens Point	453	132	74	0	58	454	77	19	0	58	392	55	55	0	0
Western Connecticut State U.	453	132	132	0	0	604	9	9	0	0	284	123	123	0	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Shippensburg U. Pennsylvania	455	131	131	0	0	398	117	117	0	0	525	14	14	0	0
SUNY, Oswego	455	131	52	0	79	436	85	38	0	47	419	46	14	0	32
Catholic U. of America	457	130	66	64	0	488	53	32	21	0	355	77	34	43	0
Abilene Christian U.	458	129	45	0	84	391	124	40	0	84	572	5	5	0	0
Nicholls State U.	458	129	129	0	0	429	91	91	0	0	439	38	38	0	0
Radford U.	460	126	68	0	58	400	115	57	0	58	539	11	11	0	0
Florida Gulf Coast U.	461	123	94	14	15	475	61	53	4	4	383	62	41	10	11
Arcadia U.	461	123	112	0	11	519	40	37	0	3	342	83	75	0	8
MGH Institute of Health Professions	463	122	0	0	122	392	122	0	0	122	611	0	0	0	0
Fayetteville State U.	463	122	101	0	21	462	70	61	0	9	401	52	40	0	12
Texas A&M U.-Central Texas	463	122	122	0	0	628	3	3	0	0	291	119	119	0	0
Emory U.	466	117	78	0	39	427	93	75	0	18	482	24	3	0	21
Geisinger Commonwealth School of Medicine	466	117	117	0	0	432	90	90	0	0	472	27	27	0	0
Jacksonville State U.	466	117	117	0	0	475	61	61	0	0	390	56	56	0	0
Alcorn State U.	469	113	113	0	0	468	66	66	0	0	415	47	47	0	0
Sul Ross State U.	469	113	89	0	24	525	39	38	0	1	361	74	51	0	23
East Stroudsburg U. Pennsylvania	471	110	27	0	83	426	94	19	0	75	511	16	8	0	8
McNeese State U.	471	110	75	6	29	440	83	55	4	24	472	27	20	2	5
Bloomsburg U. Pennsylvania	473	109	55	0	54	456	76	22	0	54	452	33	33	0	0
Arkansas Tech U.	473	109	109	0	0	472	64	64	0	0	424	45	45	0	0
Lincoln Memorial U.	475	107	107	0	0	458	74	74	0	0	452	33	33	0	0
Quinnipiac U.	475	107	107	0	0	463	69	69	0	0	439	38	38	0	0
Icahn School of Medicine at Mt. Sinai	477	106	106	0	0	411	106	106	0	0	611	0	0	0	0
Northern Michigan U.	478	105	87	0	18	458	74	59	0	15	458	31	28	0	3
Lipscomb U.	479	103	100	1	2	448	80	78	0	2	487	23	22	1	0
St. Mary's U., San Antonio	480	102	73	29	0	488	53	41	12	0	411	49	32	17	0
Southern U. and A&M C., New Orleans	481	101	101	0	0	481	59	59	0	0	427	42	42	0	0
U. Wisconsin-Green Bay	481	101	101	0	0	529	38	38	0	0	382	63	63	0	0
Molloy C.	483	99	19	0	80	436	85	9	0	76	525	14	10	0	4
Canisius C.	483	99	83	0	16	494	50	40	0	10	411	49	43	0	6
Frostburg State U.	483	99	99	0	0	499	48	48	0	0	404	51	51	0	0
U. Dallas	483	99	99	0	0	551	29	29	0	0	366	70	70	0	0
U. Guam	483	99	99	0	0	572	20	20	0	0	351	79	79	0	0
New Jersey City U.	488	98	80	0	18	508	44	38	0	6	396	54	42	0	12
Tuskegee U.	489	97	77	13	7	440	83	66	10	7	525	14	11	3	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Hawaii, Hilo	490	96	96	0	0	470	65	65	0	0	458	31	31	0	0
U. Nebraska, Medical Center	491	95	85	0	10	467	67	57	0	10	468	28	28	0	0
Millersville U. Pennsylvania	492	94	94	0	0	451	79	79	0	0	519	15	15	0	0
Worcester State U.	493	92	16	0	76	484	58	5	0	53	448	34	11	0	23
Inter American U. Puerto Rico, San German	494	90	90	0	0	475	61	61	0	0	465	29	29	0	0
Hawaii Pacific U.	494	90	61	0	29	479	60	39	0	21	462	30	22	0	8
American International C.	496	88	71	0	17	451	79	65	0	14	553	9	6	0	3
Lindenwood U.	496	88	60	0	28	474	63	42	0	21	479	25	18	0	7
Western Colorado U.	496	88	84	0	4	475	61	57	0	4	472	27	27	0	0
Duquesne U.	499	87	75	12	0	444	82	71	11	0	572	5	4	1	0
U. Tennessee, Health Science Center	500	86	39	5	42	448	80	33	5	42	566	6	6	0	0
Campbell U.	501	85	0	0	85	436	85	0	0	85	611	0	0	0	0
Wayland Baptist U.	501	85	85	0	0	492	52	52	0	0	452	33	33	0	0
Salus U.	503	84	0	0	84	439	84	0	0	84	611	0	0	0	0
Minnesota State U., Moorhead	504	83	34	0	49	453	78	30	0	48	572	5	4	0	1
U. Wisconsin-Oshkosh	505	82	82	0	0	589	14	14	0	0	373	68	68	0	0
Creighton U.	506	80	26	0	54	493	51	21	0	30	465	29	5	0	24
New Mexico Highlands U.	506	80	80	0	0	494	50	50	0	0	462	30	30	0	0
SUNY, C. Brockport	506	80	56	0	24	525	39	29	0	10	429	41	27	0	14
Vermont Technical C.	509	78	77	1	0	604	9	9	0	0	371	69	68	1	0
Texas A&M International U.	510	73	73	0	0	589	14	14	0	0	386	59	59	0	0
U. Pennsylvania	511	71	71	0	0	488	53	53	0	0	507	18	18	0	0
Truman State U.	511	71	39	0	32	531	37	7	0	30	448	34	32	0	2
CUNY, C. Staten Island	511	71	62	9	0	578	19	18	1	0	401	52	44	8	0
Evergreen State C.	514	70	70	0	0	479	60	60	0	0	545	10	10	0	0
Mississippi U. for Women	514	70	7	0	63	481	59	1	0	58	539	11	6	0	5
DeSales U.	514	70	31	0	39	498	49	19	0	30	492	21	12	0	9
Charles R. Drew U. of Medicine and Science	517	69	33	0	36	465	68	32	0	36	602	1	1	0	0
Cooper Union for the Advancement of Science and Art	517	69	0	69	0	505	45	0	45	0	482	24	0	24	0
Palo Alto U.	519	68	68	0	0	628	3	3	0	0	375	65	65	0	0
Roger Williams U.	520	67	67	0	0	504	47	47	0	0	498	20	20	0	0
Southern Nazarene U.	521	65	65	0	0	470	65	65	0	0	611	0	0	0	0
Mercyhurst U.	521	65	53	0	12	494	50	46	0	4	519	15	7	0	8
SUNY, C. Cortland	523	64	0	0	64	505	45	0	0	45	501	19	0	0	19
Jackson State U.	524	61	35	26	0	505	45	27	18	0	511	16	8	8	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Fort Valley State U.	524	61	38	0	23	531	37	26	0	11	482	24	12	0	12
California U. of Science and Medicine	526	59	59	0	0	481	59	59	0	0	611	0	0	0	0
U. Montevallo	527	58	0	0	58	485	57	0	0	57	602	1	0	0	1
SUNY, Fredonia	527	58	12	0	46	487	54	8	0	46	578	4	4	0	0
Kettering U.	527	58	6	52	0	514	42	5	37	0	511	16	1	15	0
Des Moines U., Osteopathic Medical Center	527	58	24	0	34	570	22	16	0	6	444	36	8	0	28
Butler U.	527	58	58	0	0	639	0	0	0	0	387	58	58	0	0
Virginia State U.	532	57	57	0	0	516	41	41	0	0	511	16	16	0	0
Cameron U.	532	57	57	0	0	572	20	20	0	0	443	37	37	0	0
Metropolitan State U.	532	57	57	0	0	615	7	7	0	0	407	50	50	0	0
U. of the Incarnate Word	535	55	41	0	14	511	43	34	0	9	534	12	7	0	5
California State U., Bakersfield	535	55	55	0	0	525	39	39	0	0	511	16	16	0	0
Medical U. South Carolina	535	55	15	0	40	560	25	13	0	12	462	30	2	0	28
St. Thomas U.	538	54	51	0	3	494	50	47	0	3	578	4	4	0	0
Plymouth State U.	539	53	39	0	14	529	38	31	0	7	519	15	8	0	7
Hampton U.	540	52	28	0	24	499	48	26	0	22	578	4	2	0	2
Andrews U.	540	52	1	0	51	549	30	1	0	29	488	22	0	0	22
Northeastern Ohio Universities, C. of Medicine	542	51	17	0	34	519	40	17	0	23	539	11	0	0	11
Gonzaga U.	542	51	30	21	0	551	29	20	9	0	488	22	10	12	0
Ithaca C.	544	50	50	0	0	519	40	40	0	0	545	10	10	0	0
U. West Alabama	544	50	50	0	0	519	40	40	0	0	545	10	10	0	0
Medical C. Wisconsin	544	50	16	0	34	596	12	5	0	7	439	38	11	0	27
U. of the Virgin Islands	547	49	49	0	0	508	44	44	0	0	572	5	5	0	0
SUNY, C. Plattsburgh	547	49	49	0	0	537	35	35	0	0	525	14	14	0	0
Lake Erie C. Osteopathic Medicine	549	48	0	0	48	499	48	0	0	48	611	0	0	0	0
U. of Saint Mary	549	48	48	0	0	511	43	43	0	0	572	5	5	0	0
U. Arkansas, Pine Bluff	551	47	47	0	0	546	32	32	0	0	519	15	15	0	0
Georgia C. and State U.	552	46	24	0	22	546	32	22	0	10	525	14	2	0	12
Coastal Carolina U.	552	46	46	0	0	589	14	14	0	0	455	32	32	0	0
South Carolina State U.	554	45	0	0	45	511	43	0	0	43	596	2	0	0	2
Springfield C.	554	45	37	0	8	525	39	32	0	7	566	6	5	0	1
Delta State U.	556	44	44	0	0	567	23	23	0	0	492	21	21	0	0
U. California, Merced	557	43	8	35	0	516	41	8	33	0	596	2	0	2	0
Winthrop U.	557	43	43	0	0	519	40	40	0	0	590	3	3	0	0
Oklahoma State U., Center for Health Sciences	557	43	10	0	33	541	34	6	0	28	553	9	4	0	5

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
San Juan Bautista School of Medicine	560	41	0	0	41	516	41	0	0	41	611	0	0	0	0
Kentucky State U.	560	41	41	0	0	543	33	33	0	0	561	8	8	0	0
Florida Polytechnic U.	560	41	33	8	0	546	32	25	7	0	553	9	8	1	0
Oregon Institute of Technology	560	41	17	24	0	565	24	9	15	0	510	17	8	9	0
Bowie State U.	560	41	41	0	0	570	22	22	0	0	501	19	19	0	0
U. Wisconsin-Parkside	560	41	41	0	0	581	17	17	0	0	482	24	24	0	0
Bard C.	566	40	40	0	0	536	36	36	0	0	578	4	4	0	0
Clark Atlanta U.	566	40	40	0	0	543	33	33	0	0	563	7	7	0	0
Inter American U. Puerto Rico, Fajardo	566	40	40	0	0	639	0	0	0	0	434	40	40	0	0
Louisiana State U., Shreveport	569	39	39	0	0	560	25	25	0	0	525	14	14	0	0
Christopher Newport U.	569	39	39	0	0	581	17	17	0	0	488	22	22	0	0
Albert Einstein C. of Medicine	571	37	0	0	37	531	37	0	0	37	611	0	0	0	0
Fisk U.	571	37	37	0	0	531	37	37	0	0	611	0	0	0	0
Smith C.	571	37	8	0	29	555	27	0	0	27	545	10	8	0	2
Gallaudet U.	574	36	0	0	36	537	35	0	0	35	602	1	0	0	1
Wesleyan U.	575	35	35	0	0	537	35	35	0	0	611	0	0	0	0
Delaware State U.	575	35	25	0	10	543	33	23	0	10	596	2	2	0	0
Lincoln U.	575	35	35	0	0	588	15	15	0	0	498	20	20	0	0
U. of Mary Hardin Baylor	578	34	34	0	0	560	25	25	0	0	553	9	9	0	0
Northwestern State U. Louisiana	578	34	34	0	0	565	24	24	0	0	545	10	10	0	0
Widener U.	578	34	0	34	0	567	23	0	23	0	539	11	0	11	0
Loras C.	581	33	33	0	0	555	27	27	0	0	566	6	6	0	0
Milwaukee School of Engineering	581	33	0	33	0	581	17	0	17	0	511	16	0	16	0
Trinity C., Hartford	581	33	33	0	0	610	8	8	0	0	479	25	25	0	0
Colorado State U., Pueblo	584	32	25	7	0	596	12	8	4	0	498	20	17	3	0
Williams C.	585	30	30	0	0	549	30	30	0	0	611	0	0	0	0
Morehead State U.	585	30	30	0	0	581	17	17	0	0	531	13	13	0	0
Clafin U.	587	29	29	0	0	551	29	29	0	0	611	0	0	0	0
U. South Carolina, Aiken	587	29	29	0	0	557	26	26	0	0	590	3	3	0	0
Saint Martin's U.	587	29	12	17	0	560	25	10	15	0	578	4	2	2	0
Bethune-Cookman U.	587	29	29	0	0	572	20	20	0	0	553	9	9	0	0
U. Arkansas, Monticello	587	29	29	0	0	610	8	8	0	0	492	21	21	0	0
California Institute of Technology	592	28	0	28	0	554	28	0	28	0	611	0	0	0	0
West Virginia State U.	593	27	27	0	0	557	26	26	0	0	602	1	1	0	0
Vanguard U.	594	26	26	0	0	557	26	26	0	0	611	0	0	0	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Drew U.	594	26	23	0	3	572	20	20	0	0	566	6	3	0	3
Elizabeth City State U.	594	26	26	0	0	587	16	16	0	0	545	10	10	0	0
Kutztown U. Pennsylvania	594	26	26	0	0	598	11	11	0	0	519	15	15	0	0
Georgia Southwestern State U.	594	26	26	0	0	610	8	8	0	0	507	18	18	0	0
Alfred U.	599	25	0	25	0	560	25	0	25	0	611	0	0	0	0
Fielding Graduate U.	599	25	25	0	0	589	14	14	0	0	539	11	11	0	0
Bucknell U.	601	24	15	9	0	567	23	15	8	0	602	1	0	1	0
Savannah State U.	601	24	24	0	0	572	20	20	0	0	578	4	4	0	0
Aurora U.	601	24	0	0	24	594	13	0	0	13	539	11	0	0	11
SUNY, Oneonta	601	24	24	0	0	610	8	8	0	0	511	16	16	0	0
Cedars-Sinai Medical Center	601	24	24	0	0	639	0	0	0	0	482	24	24	0	0
California State U., Stanislaus	606	23	23	0	0	598	11	11	0	0	534	12	12	0	0
Salisbury U.	607	21	21	0	0	581	17	17	0	0	578	4	4	0	0
LeTourneau U.	607	21	13	8	0	604	9	1	8	0	534	12	12	0	0
New England C. of Optometry	609	20	20	0	0	572	20	20	0	0	611	0	0	0	0
Alaska Pacific U.	609	20	20	0	0	615	7	7	0	0	531	13	13	0	0
SUNY, C. of Optometry	609	20	20	0	0	632	2	2	0	0	507	18	18	0	0
Mississippi Valley State U.	612	19	9	0	10	581	17	9	0	8	596	2	0	0	2
American Museum of Natural History	613	18	18	0	0	579	18	18	0	0	611	0	0	0	0
Rockefeller U.	613	18	18	0	0	579	18	18	0	0	611	0	0	0	0
John Carroll U.	615	17	17	0	0	635	1	1	0	0	511	16	16	0	0
Alabama State U.	616	16	16	0	0	602	10	10	0	0	566	6	6	0	0
Xavier U.	616	16	16	0	0	628	3	3	0	0	531	13	13	0	0
Montana State U., Billings	618	14	14	0	0	598	11	11	0	0	590	3	3	0	0
Wilkes U.	618	14	0	14	0	602	10	0	10	0	578	4	0	4	0
Pontifical Catholic U. Puerto Rico, Mayaguez	618	14	14	0	0	625	4	4	0	0	545	10	10	0	0
Pardee RAND Graduate School	621	13	13	0	0	594	13	13	0	0	611	0	0	0	0
Winston-Salem State U.	621	13	13	0	0	604	9	9	0	0	578	4	4	0	0
Rhode Island C.	621	13	13	0	0	617	6	6	0	0	563	7	7	0	0
Memorial Sloan Kettering Cancer Center	624	12	12	0	0	639	0	0	0	0	534	12	12	0	0
U. Massachusetts, Medical School	625	11	11	0	0	598	11	11	0	0	611	0	0	0	0
Marietta C.	625	11	11	0	0	610	8	8	0	0	590	3	3	0	0
Point Loma Nazarene U.	625	11	11	0	0	617	6	6	0	0	572	5	5	0	0
Marshall B. Ketchum U.	628	10	10	0	0	604	9	9	0	0	602	1	1	0	0
U.S. Merchant Marine Academy	628	10	0	10	0	639	0	0	0	0	545	10	0	10	0

TABLE 5-4b

Institutional rankings for master's students: 2023

(Number)

Institution	All master's students					Full-time master's students					Part-time master's students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Baylor C. of Medicine	630	9	0	0	9	604	9	0	0	9	611	0	0	0	0
Walla Walla U.	630	9	9	0	0	639	0	0	0	0	553	9	9	0	0
U. Southern Maine	632	8	8	0	0	635	1	1	0	0	563	7	7	0	0
Southern Oregon U.	633	7	7	0	0	617	6	6	0	0	602	1	1	0	0
Albany C. of Pharmacy and Health Sciences	633	7	3	0	4	622	5	1	0	4	596	2	2	0	0
Bryn Mawr C.	635	6	6	0	0	617	6	6	0	0	611	0	0	0	0
Rose-Hulman Institute of Technology	635	6	0	6	0	632	2	0	2	0	578	4	0	4	0
Albany Medical C.	637	5	5	0	0	622	5	5	0	0	611	0	0	0	0
Black Hills State U.	637	5	5	0	0	622	5	5	0	0	611	0	0	0	0
Wagner C.	637	5	5	0	0	625	4	4	0	0	602	1	1	0	0
U. Portland	637	5	0	5	0	632	2	0	2	0	590	3	0	3	0
Pontifical Catholic U. Puerto Rico, Arecibo	637	5	5	0	0	635	1	1	0	0	578	4	4	0	0
SUNY, Upstate Medical U.	642	4	4	0	0	625	4	4	0	0	611	0	0	0	0
Sitting Bull C.	642	4	4	0	0	639	0	0	0	0	578	4	4	0	0
U. Central del Caribe	644	3	3	0	0	628	3	3	0	0	611	0	0	0	0
Rosalind Franklin U. of Medicine and Science	645	1	1	0	0	635	1	1	0	0	611	0	0	0	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

Note(s):

Sorted by overall number of master's students. Tied institutions are ranked first by number of full-time master's students and then alphabetically. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#). Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
All institutions ^a	-	307,229	212,969	74,992	19,268	-	268,617	188,995	66,447	13,175	-	38,612	23,974	8,545	6,093
Liberty U.	1	5,093	4,479	35	579	24	2,900	2,457	27	416	1	2,193	2,022	8	163
U. Michigan	2	5,052	2,936	1,849	267	1	4,968	2,911	1,792	265	126	84	25	57	2
U. Illinois, Urbana-Champaign	3	4,627	2,806	1,724	97	2	4,551	2,758	1,700	93	131	76	48	24	4
Purdue U.	4	4,569	2,187	2,171	211	13	3,533	1,767	1,577	189	2	1,036	420	594	22
Texas A&M U.	5	4,435	2,542	1,752	141	6	3,937	2,266	1,549	122	12	498	276	203	19
U. Wisconsin-Madison	6	4,376	3,212	865	299	7	3,918	2,834	822	262	14	458	378	43	37
Pennsylvania State U.	7	4,115	2,563	1,460	92	8	3,914	2,494	1,338	82	48	201	69	122	10
Stanford U.	8	4,065	2,622	1,371	72	3	4,047	2,610	1,365	72	256	18	12	6	0
U. California, Berkeley	9	4,033	3,016	984	33	4	4,033	3,016	984	33	359	0	0	0	0
U. Washington	10	4,029	2,844	855	330	9	3,864	2,749	817	298	59	165	95	38	32
Cornell U.	11	3,968	3,032	936	0	5	3,944	3,008	936	0	239	24	24	0	0
Johns Hopkins U.	12	3,770	2,056	956	758	22	3,053	1,885	951	217	9	717	171	5	541
U. Maryland, The	13	3,759	2,627	826	306	12	3,555	2,512	781	262	47	204	115	45	44
Massachusetts Institute of Technology	14	3,750	2,156	1,594	0	10	3,746	2,153	1,593	0	318	4	3	1	0
U. California, Los Angeles	15	3,736	2,697	859	180	11	3,736	2,697	859	180	359	0	0	0	0
Georgia Institute of Technology	16	3,658	1,418	2,240	0	14	3,442	1,350	2,092	0	44	216	68	148	0
U. Colorado	17	3,557	2,445	956	156	15	3,292	2,300	875	117	31	265	145	81	39
U. Minnesota	18	3,442	2,404	820	218	18	3,275	2,293	777	205	57	167	111	43	13
U. California, San Diego	19	3,332	2,514	818	0	16	3,290	2,490	800	0	182	42	24	18	0
U. Florida	20	3,308	2,212	890	206	21	3,079	2,062	825	192	40	229	150	65	14
Harvard U.	21	3,280	2,839	343	98	17	3,280	2,839	343	98	359	0	0	0	0
U. California, Davis	22	3,274	2,618	609	47	19	3,244	2,601	597	46	214	30	17	12	1
Ohio State U.	23	3,255	2,111	1,081	63	20	3,201	2,086	1,053	62	167	54	25	28	1
U. Pennsylvania	24	2,952	2,196	706	50	23	2,918	2,184	684	50	206	34	12	22	0
Arizona State U.	25	2,879	1,907	903	69	42	2,044	1,313	689	42	6	835	594	214	27
Northwestern U.	26	2,860	1,883	936	41	25	2,833	1,864	928	41	224	27	19	8	0
U. Southern California	27	2,823	1,880	810	133	26	2,788	1,864	792	132	200	35	16	18	1
Indiana U.	28	2,776	2,116	192	468	49	1,751	1,337	84	330	3	1,025	779	108	138
Virginia Polytechnic Institute and State U.	29	2,747	1,595	1,152	0	29	2,503	1,454	1,049	0	34	244	141	103	0
Columbia U. in the City of New York	30	2,610	1,841	705	64	27	2,572	1,825	691	56	193	38	16	14	8
U. North Carolina, Chapel Hill	31	2,604	2,229	108	267	28	2,570	2,203	108	259	206	34	26	0	8
North Carolina State U.	32	2,598	1,285	1,313	0	30	2,402	1,220	1,182	0	50	196	65	131	0
Michigan State U.	33	2,451	1,961	428	62	32	2,389	1,909	419	61	154	62	52	9	1
Rutgers, State U. New Jersey	34	2,429	2,028	351	50	33	2,385	1,987	348	50	175	44	41	3	0

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. Chicago	35	2,401	2,104	297	0	31	2,401	2,104	297	0	359	0	0	0	0
U. Pittsburgh	36	2,324	1,592	532	200	34	2,264	1,559	513	192	159	60	33	19	8
New York U.	37	2,257	1,796	346	115	41	2,068	1,668	321	79	52	189	128	25	36
U. Georgia	38	2,243	1,942	158	143	40	2,078	1,797	150	131	59	165	145	8	12
Princeton U.	39	2,238	1,661	577	0	35	2,238	1,661	577	0	359	0	0	0	0
Boston U.	40	2,180	1,486	541	153	39	2,126	1,460	541	125	167	54	26	0	28
U. California, Irvine	41	2,179	1,553	626	0	36	2,175	1,549	626	0	318	4	4	0	0
Duke U.	42	2,169	1,491	629	49	37	2,169	1,491	629	49	359	0	0	0	0
Yale U.	42	2,169	1,704	345	120	38	2,167	1,702	345	120	339	2	2	0	0
U. Arizona	44	2,154	1,684	296	174	54	1,678	1,291	261	126	13	476	393	35	48
U. Illinois, Chicago	45	2,129	1,257	406	466	53	1,686	1,030	363	293	15	443	227	43	173
U. Connecticut	46	2,099	1,349	608	142	44	1,934	1,249	560	125	59	165	100	48	17
Iowa State U.	47	2,097	1,346	727	24	61	1,448	903	532	13	10	649	443	195	11
U. Utah	48	2,056	1,366	517	173	47	1,771	1,217	426	128	29	285	149	91	45
Carnegie Mellon U.	49	2,039	1,101	938	0	43	2,006	1,080	926	0	210	33	21	12	0
U. Massachusetts, Amherst	50	1,985	1,492	426	67	50	1,727	1,294	376	57	33	258	198	50	10
U. Tennessee, Knoxville	51	1,948	1,196	680	72	89	1,033	691	304	38	5	915	505	376	34
Washington U., Saint Louis	52	1,911	1,400	459	52	45	1,901	1,397	455	49	286	10	3	4	3
U. Virginia	53	1,837	1,179	636	22	46	1,821	1,171	628	22	263	16	8	8	0
SUNY, Stony Brook U.	54	1,828	1,429	355	44	48	1,761	1,412	326	23	144	67	17	29	21
Northeastern U.	55	1,715	845	781	89	52	1,687	842	763	82	221	28	3	18	7
Vanderbilt U.	56	1,700	1,309	348	43	51	1,691	1,305	343	43	296	9	4	5	0
Colorado State U., Fort Collins	57	1,677	1,189	463	25	112	702	577	112	13	4	975	612	351	12
U. Delaware	58	1,674	1,145	512	17	55	1,648	1,132	501	15	228	26	13	11	2
U. Houston	59	1,658	965	586	107	62	1,431	825	515	91	41	227	140	71	16
U. California, Riverside	60	1,649	1,315	334	0	56	1,635	1,303	332	0	271	14	12	2	0
SUNY, U. Buffalo	61	1,595	1,110	371	114	59	1,501	1,058	347	96	113	94	52	24	18
U. California, Santa Barbara	62	1,570	1,254	316	0	57	1,570	1,254	316	0	359	0	0	0	0
George Mason U.	63	1,561	1,354	171	36	80	1,207	1,039	139	29	23	354	315	32	7
Florida State U.	64	1,549	1,220	213	116	66	1,398	1,118	198	82	71	151	102	15	34
CUNY, Graduate Center	65	1,535	1,494	0	41	58	1,533	1,492	0	41	339	2	2	0	0
Texas Tech U.	66	1,522	1,081	389	52	71	1,336	971	323	42	54	186	110	66	10
George Washington U.	67	1,491	944	232	315	112	702	516	84	102	7	789	428	148	213
U. Notre Dame	68	1,486	880	606	0	60	1,471	874	597	0	268	15	6	9	0
Louisiana State U.	69	1,485	1,091	317	77	68	1,348	1,002	279	67	81	137	89	38	10

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
U. South Florida, Tampa	70	1,484	919	348	217	76	1,244	814	321	109	35	240	105	27	108
National U.	70	1,484	1,484	0	0	111	712	712	0	0	8	772	772	0	0
Emory U.	72	1,474	1,146	245	83	69	1,346	1,143	120	83	87	128	3	125	0
Clemson U.	73	1,468	877	550	41	72	1,325	775	514	36	76	143	102	36	5
Case Western Reserve U.	74	1,465	753	527	185	65	1,403	727	506	170	154	62	26	21	15
Auburn U.	74	1,465	817	602	46	87	1,056	551	467	38	16	409	266	135	8
U. Iowa	76	1,427	1,076	206	145	79	1,210	911	176	123	42	217	165	30	22
U. Central Florida	77	1,425	795	576	54	75	1,261	720	506	35	63	164	75	70	19
U. Kansas	78	1,418	1,085	195	138	73	1,303	1,012	185	106	95	115	73	10	32
Oregon State U.	79	1,414	946	390	78	74	1,302	882	351	69	98	112	64	39	9
California Institute of Technology	80	1,411	860	551	0	63	1,411	860	551	0	359	0	0	0	0
Rice U.	81	1,409	865	544	0	64	1,407	865	542	0	339	2	0	2	0
Brown U.	82	1,386	1,218	168	0	67	1,383	1,216	167	0	328	3	2	1	0
U. Texas, Dallas	83	1,360	835	502	23	78	1,224	765	438	21	83	136	70	64	2
U. Rochester	84	1,358	1,101	236	21	70	1,342	1,091	231	20	263	16	10	5	1
U. Cincinnati	85	1,357	775	392	190	83	1,122	681	302	139	37	235	94	90	51
U. Kentucky	86	1,298	915	240	143	77	1,236	884	232	120	154	62	31	8	23
U. Nebraska-Lincoln	87	1,279	954	325	0	82	1,125	836	289	0	66	154	118	36	0
U. Missouri, Columbia	88	1,213	885	222	106	95	872	699	111	62	24	341	186	111	44
U. California, Santa Cruz	89	1,207	1,139	68	0	81	1,178	1,112	66	0	219	29	27	2	0
U. Oklahoma	90	1,205	881	280	44	86	1,059	782	250	27	74	146	99	30	17
Washington State U.	91	1,181	861	271	49	84	1,081	800	248	33	105	100	61	23	16
U. South Carolina	91	1,181	783	239	159	85	1,075	736	213	126	101	106	47	26	33
Florida International U.	93	1,108	756	276	76	88	1,044	726	260	58	150	64	30	16	18
U. New Mexico	94	1,103	754	230	119	96	870	632	160	78	38	233	122	70	41
Virginia Commonwealth U.	95	1,022	497	146	379	93	883	435	133	315	78	139	62	13	64
Mississippi State U.	96	1,014	583	406	25	121	625	414	198	13	18	389	169	208	12
West Virginia U.	97	1,002	680	228	94	97	865	593	199	73	81	137	87	29	21
Georgia State U.	98	1,001	844	0	157	98	849	774	0	75	70	152	70	0	82
U. Texas Health Science Center, Houston	99	990	807	33	150	114	701	594	32	75	28	289	213	1	75
U. Alabama, Birmingham	100	987	773	109	105	99	831	704	76	51	65	156	69	33	54
U. North Texas, Denton	101	982	814	144	24	127	575	470	97	8	17	407	344	47	16
Wayne State U.	102	978	715	158	105	92	889	673	131	85	121	89	42	27	20
U. Alabama, Tuscaloosa	103	977	584	345	48	102	824	532	264	28	68	153	52	81	20
U. California, San Francisco	104	951	757	107	87	90	951	757	107	87	359	0	0	0	0

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Oklahoma State U.	105	942	705	237	0	110	725	542	183	0	42	217	163	54	0
U. Miami	106	940	780	133	27	91	928	772	130	26	279	12	8	3	1
SUNY, U. Albany	107	938	810	84	44	147	430	386	38	6	11	508	424	46	38
U. Texas, Arlington	108	935	494	397	44	120	627	320	296	11	26	308	174	101	33
U. Hawaii, Manoa	109	924	791	105	28	101	825	704	97	24	106	99	87	8	4
Syracuse U.	110	917	727	178	12	100	829	653	165	11	122	88	74	13	1
Tulane U.	111	907	645	77	185	105	781	634	77	70	89	126	11	0	115
U. Oregon	112	901	894	0	7	94	882	875	0	7	250	19	19	0	0
SUNY, Binghamton U.	112	901	587	304	10	119	633	411	220	2	30	268	176	84	8
Drexel U.	114	882	515	302	65	103	784	451	274	59	110	98	64	28	6
Nova Southeastern U.	115	858	220	0	638	109	732	146	0	586	89	126	74	0	52
Tufts U.	116	842	643	187	12	104	783	607	164	12	161	59	36	23	0
U. Nevada, Reno	117	823	587	222	14	107	747	529	208	10	131	76	58	14	4
Temple U.	118	802	682	86	34	106	770	656	84	30	212	32	26	2	4
U. Arkansas, Fayetteville	119	797	425	338	34	150	411	141	258	12	19	386	284	80	22
Dartmouth C.	120	746	581	155	10	108	746	581	155	10	359	0	0	0	0
Kansas State U.	121	738	626	112	0	118	642	544	98	0	112	96	82	14	0
U. Wisconsin-Milwaukee	122	728	433	123	172	117	661	401	107	153	144	67	32	16	19
Colorado School of Mines	123	724	244	480	0	121	625	220	405	0	106	99	24	75	0
U. Maryland, Baltimore County	124	723	610	113	0	125	591	498	93	0	85	132	112	20	0
Baylor U.	125	695	604	78	13	115	683	593	77	13	279	12	11	1	0
Old Dominion U.	126	683	393	243	47	173	328	222	83	23	21	355	171	160	24
U. Nevada, Las Vegas	127	678	530	80	68	132	524	427	63	34	66	154	103	17	34
Rensselaer Polytechnic Institute	128	670	245	425	0	116	662	243	419	0	301	8	2	6	0
U. Texas, San Antonio	129	661	406	249	6	139	474	295	176	3	53	187	111	73	3
Claremont Graduate U.	130	660	572	0	88	142	459	401	0	58	48	201	171	0	30
U. North Carolina, Charlotte	131	642	432	176	34	141	463	317	133	13	55	179	115	43	21
Lehigh U.	132	624	328	290	6	123	599	316	277	6	234	25	12	13	0
North Dakota State U.	133	615	439	143	33	137	477	331	114	32	79	138	108	29	1
U. Massachusetts, Boston	134	610	514	0	96	159	377	353	0	24	38	233	161	0	72
U. Louisville	135	606	432	143	31	133	521	370	133	18	124	85	62	10	13
U. Texas, El Paso	136	600	358	202	40	156	391	234	136	21	46	209	124	66	19
Baylor C. of Medicine	137	596	595	0	1	124	596	595	0	1	359	0	0	0	0
U. California, Merced	138	588	402	166	20	126	585	401	166	18	328	3	1	0	2
Kent State U.	138	588	518	12	58	130	555	497	10	48	210	33	21	2	10

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Georgetown U.	140	580	570	0	10	128	568	558	0	10	279	12	12	0	0
U. Texas Southwestern Medical Center	141	570	495	75	0	129	566	492	74	0	318	4	3	1	0
U. Massachusetts, Lowell	141	570	259	248	63	153	404	200	165	39	58	166	59	83	24
Utah State U.	143	558	406	152	0	210	193	141	52	0	20	365	265	100	0
Boston C.	144	540	518	0	22	131	532	513	0	19	301	8	5	0	3
Missouri U. of Science and Technology	145	534	158	376	0	140	471	146	325	0	152	63	12	51	0
U. Memphis	145	534	373	119	42	182	272	199	61	12	32	262	174	58	30
U. Wyoming	147	532	420	112	0	144	441	357	84	0	118	91	63	28	0
U. North Dakota	148	529	239	223	67	169	335	170	131	34	51	194	69	92	33
Fielding Graduate U.	149	528	528	0	0	134	482	482	0	0	174	46	46	0	0
Florida Atlantic U.	150	526	369	116	41	193	231	170	54	7	27	295	199	62	34
U. Mississippi	151	517	358	45	114	136	478	337	43	98	187	39	21	2	16
U. Rhode Island	152	512	332	111	69	157	389	259	81	49	92	123	73	30	20
U. Nebraska, Medical Center	153	497	390	0	107	187	259	197	0	62	36	238	193	0	45
U. New Hampshire	154	495	388	107	0	135	481	377	104	0	271	14	11	3	0
Worcester Polytechnic Institute	155	494	206	288	0	158	381	160	221	0	97	113	46	67	0
U. Vermont	156	488	404	65	19	149	423	357	59	7	149	65	47	6	12
U. Toledo	157	487	360	94	33	168	343	265	54	24	75	144	95	40	9
Montana State U.	158	486	388	98	0	145	439	350	89	0	173	47	38	9	0
San Diego State U.	159	476	313	67	96	138	476	313	67	96	359	0	0	0	0
Saint Louis U.	160	475	373	26	76	143	452	355	24	73	240	23	18	2	3
Brigham Young U.	160	475	314	161	0	220	166	125	41	0	25	309	189	120	0
Howard U.	162	470	408	33	29	163	366	313	25	28	103	104	95	8	1
Stevens Institute of Technology	163	468	193	275	0	148	429	180	249	0	187	39	13	26	0
New Mexico State U.	164	456	325	113	18	161	371	270	88	13	124	85	55	25	5
Michigan Technological U.	165	454	217	237	0	162	367	187	180	0	123	87	30	57	0
Southern Illinois U., Carbondale	166	452	365	69	18	151	409	337	66	6	177	43	28	3	12
New Jersey Institute of Technology	167	448	234	214	0	152	408	217	191	0	183	40	17	23	0
U. Maine	168	442	354	88	0	181	274	207	67	0	56	168	147	21	0
Brandeis U.	169	441	441	0	0	146	438	438	0	0	328	3	3	0	0
Rochester Institute of Technology	170	430	268	162	0	154	398	242	156	0	212	32	26	6	0
Palo Alto U.	171	420	420	0	0	155	397	397	0	0	240	23	23	0	0
Texas Woman's U.	172	416	221	0	195	286	61	53	0	8	21	355	168	0	187
Ohio U.	173	410	280	98	32	170	332	239	67	26	129	78	41	31	6
U. Idaho	174	406	318	88	0	174	314	261	53	0	116	92	57	35	0

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Oregon Health and Science U.	175	397	248	92	57	165	358	242	92	24	187	39	6	0	33
U. North Carolina, Greensboro	176	394	243	0	151	217	181	131	0	50	45	213	112	0	101
Illinois Institute of Technology	177	382	232	150	0	164	359	218	141	0	240	23	14	9	0
Portland State U.	178	380	344	33	3	191	251	230	21	0	86	129	114	12	3
Western Michigan U.	179	375	266	78	31	166	357	254	76	27	256	18	12	2	4
U. Massachusetts, Medical School	180	374	374	0	0	160	374	374	0	0	359	0	0	0	0
Marquette U.	181	371	245	90	36	190	252	172	64	16	93	119	73	26	20
Southern Methodist U.	182	368	274	94	0	170	332	253	79	0	196	36	21	15	0
Oakland U.	183	367	162	175	30	202	209	121	74	14	64	158	41	101	16
U. Southern Mississippi	184	361	227	64	70	185	269	162	63	44	116	92	65	1	26
Northern Illinois U.	184	361	295	10	56	206	196	182	6	8	59	165	113	4	48
Scripps Research Institute	186	356	356	0	0	167	356	356	0	0	359	0	0	0	0
North Carolina Agricultural and Technical State U.	187	347	144	203	0	202	209	90	119	0	79	138	54	84	0
Northern Arizona U.	188	344	286	13	45	180	280	240	11	29	150	64	46	2	16
U. Akron	189	337	187	149	1	183	270	143	127	0	144	67	44	22	1
Medical C. Wisconsin	190	335	230	43	62	176	292	230	42	20	177	43	0	1	42
Albert Einstein C. of Medicine	191	331	320	0	11	172	331	320	0	11	359	0	0	0	0
U. Alabama, Huntsville	192	319	151	156	12	219	168	96	70	2	71	151	55	86	10
New School	193	315	315	0	0	179	285	285	0	0	214	30	30	0	0
Columbia U., Teachers C.	194	314	300	0	14	183	270	259	0	11	175	44	41	0	3
Boise State U.	194	314	204	104	6	195	224	146	75	3	119	90	58	29	3
Wake Forest U.	196	311	252	59	0	175	301	245	56	0	286	10	7	3	0
U. Puerto Rico, Rio Piedras	197	307	307	0	0	189	254	254	0	0	169	53	53	0	0
Morgan State U.	198	306	105	111	90	178	289	98	106	85	259	17	7	5	5
Florida Institute of Technology	198	306	186	120	0	194	230	138	92	0	131	76	48	28	0
Fordham U.	200	303	303	0	0	206	196	196	0	0	100	107	107	0	0
U. Louisiana, Lafayette	201	298	198	79	21	188	255	181	59	15	177	43	17	20	6
U. Texas Health Science Center, San Antonio	202	296	201	15	80	197	220	198	15	7	131	76	3	0	73
Icahn School of Medicine at Mt. Sinai	203	291	291	0	0	177	291	291	0	0	359	0	0	0	0
U. Missouri, Kansas City	204	284	193	42	49	213	187	131	26	30	111	97	62	16	19
Bowling Green State U.	205	278	273	0	5	215	185	180	0	5	114	93	93	0	0
Loyola U., Chicago	206	276	220	0	56	192	237	210	0	27	187	39	10	0	29
Texas State U.	207	271	202	69	0	198	218	159	59	0	169	53	43	10	0
Cleveland State U.	207	271	152	119	0	200	216	116	100	0	164	55	36	19	0
Missouri State U.	207	271	0	0	271	205	197	0	0	197	135	74	0	0	74

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Rockefeller U.	210	268	268	0	0	186	268	268	0	0	359	0	0	0	0
U. Texas Medical Branch	211	260	161	0	99	211	192	138	0	54	143	68	23	0	45
Rowan U.	212	250	131	119	0	196	222	112	110	0	221	28	19	9	0
Loma Linda U.	213	244	121	0	123	232	135	84	0	51	99	109	37	0	72
U. Alaska, Fairbanks	213	244	230	14	0	258	91	84	7	0	68	153	146	7	0
U. Montana	215	241	222	1	18	258	91	88	0	3	73	150	134	1	15
Dakota State U.	216	234	234	0	0	235	131	131	0	0	104	103	103	0	0
U. Arkansas, Little Rock	217	233	222	11	0	237	128	120	8	0	102	105	102	3	0
U. Tennessee, Health Science Center	218	226	135	1	90	200	216	125	1	90	286	10	10	0	0
William and Mary	219	224	224	0	0	198	218	218	0	0	310	6	6	0	0
South Dakota State U.	220	221	155	54	12	222	160	108	43	9	158	61	47	11	3
U. Denver	221	220	198	22	0	208	194	178	16	0	228	26	20	6	0
Mercer U.	222	212	0	0	212	204	201	0	0	201	282	11	0	0	11
U. South Dakota	222	212	147	5	60	227	141	127	4	10	137	71	20	1	50
U. Tulsa	224	210	133	77	0	208	194	122	72	0	263	16	11	5	0
Miami U.	225	196	196	0	0	211	192	192	0	0	318	4	4	0	0
American U.	225	196	196	0	0	214	186	186	0	0	286	10	10	0	0
Pontifical Catholic U. Puerto Rico	225	196	196	0	0	279	69	69	0	0	88	127	127	0	0
Duquesne U.	228	193	101	0	92	218	176	99	0	77	259	17	2	0	15
Clarkson U.	229	192	73	119	0	216	183	72	111	0	296	9	1	8	0
Andrews U.	230	191	48	0	143	239	125	47	0	78	148	66	1	0	65
U. South Alabama	231	190	143	37	10	225	147	116	23	8	177	43	27	14	2
Wichita State U.	232	189	88	96	5	276	71	40	28	3	94	118	48	68	2
U. Massachusetts, Dartmouth	233	187	81	80	26	262	88	39	48	1	106	99	42	32	25
Louisiana Tech U.	234	181	96	85	0	226	145	72	73	0	196	36	24	12	0
Seton Hall U.	235	178	81	0	97	311	35	33	0	2	76	143	48	0	95
Marymount U.	236	175	175	0	0	254	98	98	0	0	130	77	77	0	0
Uniformed Services U. of the Health Sciences	237	172	136	0	36	221	162	136	0	26	286	10	0	0	10
St. John's U., Queens	237	172	75	0	97	228	137	59	0	78	200	35	16	0	19
East Tennessee State U.	239	171	78	0	93	244	116	63	0	53	164	55	15	0	40
U. Arkansas for Medical Sciences	239	171	118	0	53	248	109	91	0	18	154	62	27	0	35
Long Island U.	239	171	146	0	25	275	72	60	0	12	106	99	86	0	13
U. New Orleans	242	170	111	59	0	254	98	62	36	0	136	72	49	23	0
Butler U.	243	168	0	0	168	311	35	0	0	35	84	133	0	0	133
Embry-Riddle Aeronautical U.	244	162	20	142	0	223	152	18	134	0	286	10	2	8	0

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Catholic U. of America	245	159	96	63	0	239	125	71	54	0	206	34	25	9	0
Adelphi U.	246	156	119	0	37	264	87	87	0	0	140	69	32	0	37
Idaho State U.	246	156	85	40	31	264	87	50	18	19	140	69	35	22	12
SUNY, C. of Environmental Science and Forestry	248	155	122	33	0	224	149	117	32	0	310	6	5	1	0
Medical U. South Carolina	248	155	126	0	29	228	137	126	0	11	256	18	0	0	18
Augusta U.	248	155	119	0	36	236	129	115	0	14	228	26	4	0	22
Florida A&M U.	251	153	52	60	41	228	137	41	58	38	263	16	11	2	3
East Carolina U.	251	153	116	0	37	246	114	111	0	3	187	39	5	0	34
A. T. Still U.	251	153	0	0	153	247	113	0	0	113	183	40	0	0	40
Rush U.	254	148	58	0	90	262	88	57	0	31	159	60	1	0	59
Tennessee Technological U.	255	146	24	122	0	316	32	4	28	0	96	114	20	94	0
U. Bridgeport	255	146	0	23	123	333	21	0	10	11	91	125	0	13	112
U. Missouri, Saint Louis	257	145	128	0	17	250	102	100	0	2	177	43	28	0	15
Southern U.	257	145	137	0	8	272	74	73	0	1	137	71	64	0	7
U. Puerto Rico, Mayaguez	259	143	49	94	0	234	132	46	86	0	282	11	3	8	0
New Mexico Institute of Mining and Technology	259	143	81	62	0	243	118	72	46	0	234	25	9	16	0
CUNY, City C.	261	141	0	141	0	233	133	0	133	0	301	8	0	8	0
U. Puerto Rico, Medical Sciences Campus	262	140	53	0	87	238	126	53	0	73	271	14	0	0	14
SUNY, Upstate Medical U.	263	138	138	0	0	228	137	137	0	0	348	1	1	0	0
Kennesaw State U.	264	136	108	28	0	252	100	73	27	0	196	36	35	1	0
Central Michigan U.	265	134	134	0	0	300	44	44	0	0	119	90	90	0	0
U. Northern Colorado	266	130	106	0	24	271	75	56	0	19	164	55	50	0	5
Wright State U.	267	126	55	71	0	252	100	51	49	0	228	26	4	22	0
Ball State U.	267	126	126	0	0	280	68	68	0	0	162	58	58	0	0
U. Dayton	269	123	26	97	0	241	123	26	97	0	359	0	0	0	0
DePaul U.	269	123	123	0	0	304	41	41	0	0	128	82	82	0	0
SUNY, Downstate Health Sciences U.	271	122	47	5	70	288	53	46	5	2	140	69	1	0	68
Clark U.	272	120	120	0	0	244	116	116	0	0	318	4	4	0	0
Barry U.	272	120	56	0	64	294	49	32	0	17	137	71	24	0	47
Pardee RAND Graduate School	274	119	119	0	0	242	119	119	0	0	359	0	0	0	0
Hofstra U.	275	117	117	0	0	249	106	106	0	0	282	11	11	0	0
Villanova U.	276	114	0	97	17	269	79	0	68	11	200	35	0	29	6
U. Nebraska, Omaha	277	112	112	0	0	284	63	63	0	0	171	49	49	0	0
Tennessee State U.	278	106	84	22	0	276	71	57	14	0	200	35	27	8	0
U. Indianapolis	279	104	0	0	104	357	11	0	0	11	114	93	0	0	93

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Naval Postgraduate School	280	102	49	53	0	250	102	49	53	0	359	0	0	0	0
U. Texas Rio Grande Valley	281	100	88	12	0	285	62	59	3	0	193	38	29	9	0
U. Michigan, Flint	282	98	0	0	98	260	90	0	0	90	301	8	0	0	8
Morehouse School of Medicine	282	98	43	0	55	266	82	42	0	40	263	16	1	0	15
Yeshiva U.	284	97	97	0	0	281	67	67	0	0	214	30	30	0	0
U. North Texas, Health Science Center	285	95	81	0	14	256	94	81	0	13	348	1	0	0	1
Memorial Sloan Kettering Cancer Center	286	93	93	0	0	257	93	93	0	0	359	0	0	0	0
Massachusetts C. of Pharmacy and Health Sciences	286	93	13	0	80	318	30	13	0	17	152	63	0	0	63
South Dakota School of Mines and Technology	288	92	24	68	0	267	81	19	62	0	282	11	5	6	0
Eastern Virginia Medical School	288	92	0	0	92	366	8	0	0	8	126	84	0	0	84
Illinois State U.	290	91	75	0	16	272	74	74	0	0	259	17	1	0	16
National Louis U.	290	91	91	0	0	282	66	66	0	0	234	25	25	0	0
City of Hope, Irell and Manella Graduate School of Biological Sciences	292	90	90	0	0	260	90	90	0	0	359	0	0	0	0
Texas A&M U.-Corpus Christi	293	89	89	0	0	267	81	81	0	0	301	8	8	0	0
Middle Tennessee State U.	294	87	87	0	0	336	20	20	0	0	144	67	67	0	0
Jackson State U.	295	86	65	21	0	305	38	29	9	0	172	48	36	12	0
California Institute of Integral Studies	296	81	81	0	0	286	61	61	0	0	247	20	20	0	0
Texas Christian U.	297	79	66	0	13	269	79	66	0	13	359	0	0	0	0
Prairie View A&M U.	297	79	32	47	0	282	66	26	40	0	277	13	6	7	0
Saint Joseph's U.	299	78	59	0	19	302	42	35	0	7	196	36	24	0	12
Sam Houston State U.	300	77	77	0	0	307	37	37	0	0	183	40	40	0	0
Harrisburg U. of Science and Technology	301	76	76	0	0	272	74	74	0	0	339	2	2	0	0
Arkansas State U.	302	71	71	0	0	307	37	37	0	0	206	34	34	0	0
Wesleyan U.	303	70	70	0	0	278	70	70	0	0	359	0	0	0	0
Towson U.	304	69	63	0	6	299	46	46	0	0	240	23	17	0	6
U. of the Pacific	304	69	25	0	44	357	11	9	0	2	162	58	16	0	42
Endicott C.	306	67	51	0	16	321	28	28	0	0	187	39	23	0	16
Santa Clara U.	307	62	0	62	0	314	33	0	33	0	219	29	0	29	0
Chapman U.	308	61	39	0	22	310	36	22	0	14	234	25	17	0	8
Lamar U.	309	56	0	56	0	326	26	0	26	0	214	30	0	30	0
Tuskegee U.	310	54	48	6	0	298	47	41	6	0	306	7	7	0	0
Delaware State U.	311	53	53	0	0	289	51	51	0	0	339	2	2	0	0
Marshall U.	312	52	52	0	0	294	49	49	0	0	328	3	3	0	0
Albany Medical C.	313	51	51	0	0	289	51	51	0	0	359	0	0	0	0
Cold Spring Harbor Laboratory	313	51	51	0	0	289	51	51	0	0	359	0	0	0	0

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Creighton U.	313	51	51	0	0	292	50	50	0	0	348	1	1	0	0
Clark Atlanta U.	313	51	51	0	0	328	25	25	0	0	228	26	26	0	0
Bowie State U.	313	51	51	0	0	349	14	14	0	0	195	37	37	0	0
Van Andel Research Institute	318	50	50	0	0	292	50	50	0	0	359	0	0	0	0
Texas A&M U.-Kingsville	318	50	15	35	0	317	31	12	19	0	250	19	3	16	0
Sanford-Burnham Medical Research Institute, La Jolla	320	49	49	0	0	294	49	49	0	0	359	0	0	0	0
Cedars-Sinai Medical Center	321	48	48	0	0	297	48	48	0	0	359	0	0	0	0
Antioch U.	321	48	48	0	0	321	28	28	0	0	247	20	20	0	0
Stephen F. Austin State U.	321	48	48	0	0	333	21	21	0	0	224	27	27	0	0
U. Texas, Tyler	321	48	23	0	25	339	18	16	0	2	214	30	7	0	23
Robert Morris U.	325	46	46	0	0	301	43	43	0	0	328	3	3	0	0
Pace U.	325	46	46	0	0	336	20	20	0	0	228	26	26	0	0
Gallaudet U.	327	45	36	0	9	339	18	17	0	1	224	27	19	0	8
California State U., Los Angeles	328	42	0	0	42	302	42	0	0	42	359	0	0	0	0
U. San Diego	329	41	0	0	41	374	6	0	0	6	200	35	0	0	35
Molloy C.	329	41	0	0	41	390	1	0	0	1	183	40	0	0	40
U. North Carolina, Wilmington	331	40	40	0	0	307	37	37	0	0	328	3	3	0	0
Toyota Technological Institute, Chicago	332	38	38	0	0	305	38	38	0	0	359	0	0	0	0
Biola U.	332	38	38	0	0	311	35	35	0	0	328	3	3	0	0
Niagara U.	332	38	38	0	0	329	24	24	0	0	271	14	14	0	0
East Stroudsburg U. Pennsylvania	332	38	0	0	38	352	13	0	0	13	234	25	0	0	25
Widener U.	336	36	0	0	36	366	8	0	0	8	221	28	0	0	28
Texas Southern U.	337	35	18	0	17	321	28	12	0	16	306	7	6	0	1
U. Central Arkansas	337	35	27	0	8	344	16	16	0	0	250	19	11	0	8
Simmons U.	337	35	29	0	6	391	0	0	0	0	200	35	29	0	6
Alabama A&M U.	340	34	34	0	0	348	15	15	0	0	250	19	19	0	0
U. Tennessee, Chattanooga	340	34	34	0	0	357	11	11	0	0	240	23	23	0	0
New York Medical C.	342	33	33	0	0	314	33	33	0	0	359	0	0	0	0
Indiana U. Pennsylvania	342	33	33	0	0	355	12	12	0	0	246	21	21	0	0
James Madison U.	344	32	32	0	0	318	30	30	0	0	339	2	2	0	0
Azusa Pacific U.	344	32	0	0	32	326	26	0	0	26	310	6	0	0	6
U. West Georgia	344	32	32	0	0	355	12	12	0	0	247	20	20	0	0
Bryn Mawr C.	347	31	31	0	0	320	29	29	0	0	339	2	2	0	0
Montana Tech of U. Montana	347	31	18	13	0	344	16	10	6	0	268	15	8	7	0
Meharry Medical C.	349	28	28	0	0	321	28	28	0	0	359	0	0	0	0

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Keck Graduate Institute	350	27	27	0	0	325	27	27	0	0	359	0	0	0	0
Norfolk State U.	350	27	27	0	0	339	18	18	0	0	296	9	9	0	0
U. of the District of Columbia	350	27	27	0	0	342	17	17	0	0	286	10	10	0	0
Drew U.	350	27	0	0	27	366	8	0	0	8	250	19	0	0	19
Wilkes U.	350	27	0	0	27	391	0	0	0	0	224	27	0	0	27
New York Institute of Technology	355	25	8	8	9	333	21	7	7	7	318	4	1	1	2
U. Alaska, Anchorage	355	25	25	0	0	344	16	16	0	0	296	9	9	0	0
Polytechnic U. Puerto Rico	355	25	0	25	0	374	6	0	6	0	250	19	0	19	0
Maharishi U. of Management	358	24	24	0	0	329	24	24	0	0	359	0	0	0	0
Rosalind Franklin U. of Medicine and Science	359	23	23	0	0	331	23	23	0	0	359	0	0	0	0
U. Louisiana, Monroe	359	23	5	0	18	332	22	5	0	17	348	1	0	0	1
Indiana State U.	361	22	22	0	0	352	13	13	0	0	296	9	9	0	0
U. Northern Iowa	361	22	22	0	0	370	7	7	0	0	268	15	15	0	0
Clarion U. Pennsylvania	361	22	22	0	0	391	0	0	0	0	245	22	22	0	0
Alabama State U.	364	20	20	0	0	370	7	7	0	0	277	13	13	0	0
American Museum of Natural History	365	19	19	0	0	338	19	19	0	0	359	0	0	0	0
Alfred U.	366	18	0	18	0	366	8	0	8	0	286	10	0	10	0
Northern Kentucky U.	367	17	0	0	17	342	17	0	0	17	359	0	0	0	0
Springfield C.	367	17	0	0	17	344	16	0	0	16	348	1	0	0	1
Oklahoma State U., Center for Health Sciences	367	17	17	0	0	382	3	3	0	0	271	14	14	0	0
Xavier U.	367	17	0	0	17	391	0	0	0	0	259	17	0	0	17
U. Dallas	371	16	16	0	0	349	14	14	0	0	339	2	2	0	0
North Carolina Central U.	371	16	16	0	0	363	10	10	0	0	310	6	6	0	0
Texas A&M U.-Commerce	371	16	16	0	0	384	2	2	0	0	271	14	14	0	0
Salus U.	374	15	15	0	0	357	11	11	0	0	318	4	4	0	0
Lipscomb U.	374	15	15	0	0	377	5	5	0	0	286	10	10	0	0
U. Central del Caribe	376	14	14	0	0	349	14	14	0	0	359	0	0	0	0
U. Detroit Mercy	376	14	0	14	0	352	13	0	13	0	348	1	0	1	0
U. North Alabama	376	14	0	0	14	357	11	0	0	11	328	3	0	0	3
Virginia State U.	379	13	13	0	0	365	9	9	0	0	318	4	4	0	0
Oklahoma City U.	379	13	0	0	13	374	6	0	0	6	306	7	0	0	7
SUNY, C. of Optometry	381	11	11	0	0	357	11	11	0	0	359	0	0	0	0
Youngstown State U.	381	11	11	0	0	370	7	7	0	0	318	4	4	0	0
Elmezzzi Graduate School of Molecular Medicine	383	10	10	0	0	363	10	10	0	0	359	0	0	0	0
Hampton U.	383	10	8	0	2	370	7	7	0	0	328	3	1	0	2

TABLE 5-4c

Institutional rankings for doctoral students: 2023

(Number)

Institution	All doctoral students					Full-time doctoral students					Part-time doctoral students				
	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health	Rank	Total	Science	Engineering	Health
Coastal Carolina U.	383	10	10	0	0	379	4	4	0	0	310	6	6	0	0
Northeastern Ohio Universities, C. of Medicine	383	10	0	0	10	379	4	0	0	4	310	6	0	0	6
West Texas A&M U.	383	10	10	0	0	382	3	3	0	0	306	7	7	0	0
Lawrence Technological U.	383	10	0	10	0	391	0	0	0	0	286	10	0	10	0
California State U., Long Beach	389	8	0	8	0	384	2	0	2	0	310	6	0	6	0
U. New Haven	389	8	0	8	0	384	2	0	2	0	310	6	0	6	0
Lincoln Memorial U.	391	6	6	0	0	384	2	2	0	0	318	4	4	0	0
Lake Erie C. Osteopathic Medicine	392	5	4	0	1	377	5	4	0	1	359	0	0	0	0
Des Moines U., Osteopathic Medical Center	392	5	5	0	0	379	4	4	0	0	348	1	1	0	0
Western Illinois U.	392	5	5	0	0	384	2	2	0	0	328	3	3	0	0
U. of the Incarnate Word	395	3	3	0	0	384	2	2	0	0	348	1	1	0	0
Roosevelt U.	395	3	3	0	0	391	0	0	0	0	328	3	3	0	0
U. Hawaii, Hilo	397	2	0	0	2	391	0	0	0	0	339	2	0	0	2
C. Charleston	398	1	1	0	0	391	0	0	0	0	348	1	1	0	0
Kean U.	398	1	0	0	1	391	0	0	0	0	348	1	0	0	1
SUNY, Polytechnic Institute	398	1	0	1	0	391	0	0	0	0	348	1	0	1	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

Note(s):

Sorted by overall number of doctoral students. Tied institutions are ranked first by number of full-time doctoral students and then alphabetically. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
All institutions ^a	-	65,850	37,982	9,051	18,817
Harvard U.	1	5,704	2,042	226	3,436
Stanford U.	2	2,487	1,143	388	956
Johns Hopkins U.	3	1,770	670	142	958
U. Minnesota	4	1,612	834	155	623
Massachusetts Institute of Technology	5	1,463	751	712	0
Yale U.	6	1,427	813	90	524
U. Michigan	7	1,318	656	253	409
U. California, Berkeley	8	1,308	1,010	272	26
U. Pennsylvania	9	1,279	639	116	524
U. California, San Diego	10	1,188	528	162	498
Columbia U. in the City of New York	11	1,170	583	155	432
Cornell U.	12	1,076	602	146	328
Northwestern U.	13	977	549	136	292
U. California, Los Angeles	14	975	596	116	263
Washington U., Saint Louis	15	942	413	61	468
New York U.	16	821	576	26	219
U. Wisconsin-Madison	17	784	451	130	203
U. Florida	18	772	473	71	228
U. Pittsburgh	19	764	214	56	494
Princeton U.	20	718	527	191	0
U. Washington	21	702	423	75	204
U. North Carolina, Chapel Hill	22	690	363	12	315
Duke U.	23	684	479	88	117
U. Colorado	24	653	397	70	186
U. California, Davis	25	631	458	77	96
U. Chicago	26	624	380	119	125
U. Texas Southwestern Medical Center	27	575	275	11	289
Michigan State U.	28	573	485	54	34
Ohio State U.	29	572	262	93	217
Emory U.	30	551	235	28	288
U. Texas M. D. Anderson Cancer Center	30	551	86	0	465
Texas A&M U.	32	537	413	101	23
California Institute of Technology	33	523	406	117	0
Icahn School of Medicine at Mt. Sinai	34	515	515	0	0
North Carolina State U.	35	503	349	150	4

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
Purdue U.	36	498	285	164	49
Baylor C. of Medicine	37	491	422	0	69
U. Illinois, Urbana-Champaign	38	480	301	168	11
U. Arizona	39	458	378	56	24
Rutgers, State U. New Jersey	40	449	238	16	195
U. California, Irvine	41	424	289	73	62
Pennsylvania State U.	42	423	317	99	7
U. Southern California	43	421	190	71	160
Vanderbilt U.	44	411	263	34	114
U. Maryland, The	45	410	316	87	7
U. Virginia	46	402	239	49	114
U. Missouri, Columbia	47	380	216	36	128
Indiana U.	48	367	196	16	155
U. Iowa	49	333	138	33	162
Boston U.	50	314	191	63	60
Georgia Institute of Technology	51	306	122	184	0
SUNY, Stony Brook U.	52	302	217	35	50
Brown U.	53	299	233	49	17
SUNY, U. Buffalo	54	296	229	41	26
U. California, Santa Barbara	55	293	208	85	0
Northeastern U.	56	291	165	59	67
Arizona State U.	57	280	179	91	10
U. Georgia	58	279	246	16	17
Iowa State U.	59	277	232	45	0
Florida International U.	60	274	208	53	13
Florida State U.	61	269	213	50	6
Virginia Polytechnic Institute and State U.	62	267	183	81	3
U. Massachusetts, Medical School	63	263	263	0	0
Scripps Research Institute	64	261	261	0	0
U. South Florida, Tampa	65	260	203	20	37
U. Utah	66	258	203	21	34
U. Illinois, Chicago	67	252	108	22	122
U. Miami	68	247	119	9	119
U. Alabama, Birmingham	69	236	95	10	131
Oregon Health and Science U.	70	232	148	12	72
U. Kentucky	70	232	188	20	24

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
Cedars-Sinai Medical Center	72	231	231	0	0
U. Texas Health Science Center, Houston	73	229	0	0	229
Albert Einstein C. of Medicine	74	228	157	0	71
U. California, Riverside	75	226	181	43	2
Carnegie Mellon U.	76	224	139	85	0
Louisiana State U.	77	222	210	11	1
U. Oklahoma	78	220	132	30	58
U. Connecticut	79	219	173	27	19
U. Central Florida	80	218	94	117	7
U. Cincinnati	81	215	61	24	130
Colorado State U., Fort Collins	82	213	174	18	21
Rice U.	82	213	124	89	0
Case Western Reserve U.	84	207	148	25	34
Rockefeller U.	85	206	206	0	0
U. Houston	86	205	127	67	11
Oregon State U.	87	196	153	24	19
Dartmouth C.	88	195	156	37	2
City of Hope, Irell and Manella Graduate School of Biological Sciences	89	182	182	0	0
U. Hawaii, Manoa	90	173	127	31	15
U. Kansas	90	173	96	24	53
Virginia Commonwealth U.	92	170	82	11	77
U. Texas Health Science Center, San Antonio	93	169	102	0	67
Auburn U.	94	168	132	30	6
Georgetown U.	95	166	164	0	2
U. California, Santa Cruz	96	165	154	11	0
Tufts U.	97	162	108	47	7
U. Massachusetts, Amherst	98	161	113	45	3
Washington State U.	99	159	115	29	15
U. Tennessee, Knoxville	100	156	98	53	5
U. Delaware	101	153	76	76	1
Medical C. Wisconsin	102	151	68	3	80
U. Nebraska-Lincoln	103	150	124	25	1
U. Rochester	104	149	92	18	39
Tulane U.	105	139	101	3	35
Cold Spring Harbor Laboratory	106	132	132	0	0
Woods Hole Oceanographic Institution	106	132	114	18	0

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Notre Dame	108	130	73	57	0
Medical U. South Carolina	109	129	61	1	67
Clemson U.	110	124	84	38	2
Wake Forest U.	111	120	44	18	58
Wayne State U.	112	119	84	10	25
U. South Carolina	113	117	43	42	32
Howard U.	114	116	33	6	77
Texas Tech U.	115	115	83	20	12
Temple U.	116	110	80	4	26
Augusta U.	117	107	76	0	31
U. Nebraska, Medical Center	118	106	40	0	66
Brandeis U.	119	104	104	0	0
Georgia State U.	120	99	94	0	5
U. Arkansas, Fayetteville	121	98	57	41	0
U. Idaho	122	97	86	11	0
CUNY, City C.	123	91	64	27	0
Kansas State U.	124	90	78	11	1
U. New Mexico	124	90	68	11	11
U. Texas, San Antonio	126	87	66	16	5
U. Texas, Dallas	127	86	54	30	2
San Diego State U.	128	85	63	17	5
Drexel U.	129	84	42	33	9
U. Mississippi	129	84	43	9	32
U. Vermont	129	84	67	4	13
U. Louisville	132	83	30	13	40
U. Tennessee, Health Science Center	133	82	37	0	45
Sanford-Burnham Medical Research Institute, La Jolla	134	80	80	0	0
Syracuse U.	135	79	67	12	0
U. Texas Medical Branch	135	79	79	0	0
U. Oregon	137	77	75	0	2
George Mason U.	138	74	59	15	0
U. Alabama, Tuscaloosa	138	74	43	31	0
U. Nevada, Reno	138	74	61	12	1
Baylor U.	141	69	54	14	1
Boston C.	142	68	63	4	1
SUNY, U. Albany	142	68	41	8	19

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Texas, Arlington	144	65	26	35	4
George Washington U.	145	63	29	12	22
U. Nevada, Las Vegas	146	62	55	3	4
Old Dominion U.	147	61	54	6	1
Van Andel Research Institute	147	61	61	0	0
U. Maryland, Baltimore County	149	60	57	3	0
Utah State U.	149	60	54	5	1
New Mexico State U.	151	59	49	10	0
Southern Methodist U.	152	58	36	22	0
West Virginia U.	152	58	38	19	1
Loyola U., Chicago	154	56	30	0	26
North Dakota State U.	155	55	40	10	5
U. Alaska, Fairbanks	156	54	46	8	0
Oklahoma State U.	157	53	40	13	0
U. New Hampshire	157	53	43	10	0
U. Wisconsin-Milwaukee	157	53	33	20	0
U. Louisiana, Lafayette	160	52	37	13	2
U. Wyoming	161	51	35	16	0
Lehigh U.	162	50	19	31	0
Northern Arizona U.	162	50	46	3	1
U. California, Merced	162	50	25	24	1
U. North Texas, Denton	162	50	31	18	1
U. Toledo	162	50	36	3	11
Colorado School of Mines	167	48	13	35	0
U. Texas, El Paso	168	47	28	11	8
U. Montana	169	46	40	0	6
Missouri U. of Science and Technology	170	45	12	33	0
U. Massachusetts, Lowell	171	44	24	17	3
Florida Atlantic U.	172	43	31	11	1
Texas State U.	173	42	30	12	0
Mississippi State U.	174	41	34	7	0
Saint Louis U.	175	40	39	1	0
Worcester Polytechnic Institute	176	39	24	15	0
Montana State U.	177	38	33	5	0
U. Arkansas for Medical Sciences	177	38	30	5	3
U. Maine	179	37	30	7	0

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Memphis	180	36	25	10	1
U. North Carolina, Charlotte	181	35	24	9	2
American Museum of Natural History	182	34	34	0	0
Boise State U.	182	34	22	12	0
U. Rhode Island	182	34	26	3	5
William and Mary	182	34	34	0	0
Catholic U. of America	186	33	31	2	0
East Carolina U.	186	33	25	3	5
U. North Dakota	188	31	30	1	0
Uniformed Services U. of the Health Sciences	188	31	20	0	11
Chapman U.	190	30	23	2	5
North Carolina Agricultural and Technical State U.	191	29	18	11	0
Rowan U.	192	28	14	11	3
Morehouse School of Medicine	193	27	27	0	0
Morgan State U.	194	26	16	9	1
U. Texas, Tyler	194	26	23	0	3
Marquette U.	196	25	10	11	4
Oklahoma State U., Center for Health Sciences	196	25	23	0	2
Kent State U.	198	24	22	1	1
U. Missouri, Kansas City	198	24	8	3	13
Rochester Institute of Technology	200	23	16	7	0
U. Alabama, Huntsville	200	23	19	4	0
Texas A&M U.-Corpus Christi	202	22	21	1	0
U. South Alabama	202	22	16	4	2
U. North Texas, Health Science Center	204	21	21	0	0
U. Puerto Rico, Medical Sciences Campus	204	21	15	0	6
Albany Medical C.	206	20	20	0	0
Saint Joseph's U.	206	20	1	0	19
SUNY, C. of Environmental Science and Forestry	206	20	17	3	0
U. South Dakota	206	20	18	2	0
South Dakota State U.	210	19	12	4	3
U. North Carolina, Greensboro	210	19	19	0	0
Creighton U.	212	18	17	0	1
Michigan Technological U.	212	18	11	7	0
New York Medical C.	212	18	18	0	0
Nova Southeastern U.	212	18	7	0	11

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
SUNY, Upstate Medical U.	212	18	9	0	9
Wesleyan U.	212	18	18	0	0
Ohio U.	218	17	11	3	3
Southern Illinois U., Carbondale	218	17	14	0	3
Villanova U.	220	16	7	9	0
Central Michigan U.	221	14	9	3	2
Oakland U.	221	14	10	0	4
Tennessee State U.	221	14	13	1	0
U. Dayton	221	14	13	1	0
Loma Linda U.	225	13	4	0	9
Portland State U.	225	13	12	1	0
San Francisco State U.	225	13	12	0	1
U. Massachusetts, Boston	225	13	13	0	0
U. Southern Mississippi	225	13	9	4	0
Western Michigan U.	225	13	5	8	0
Keck Graduate Institute	231	12	4	1	7
Northern Illinois U.	231	12	12	0	0
SUNY, Downstate Health Sciences U.	231	12	7	1	4
U. Texas Rio Grande Valley	231	12	10	1	1
Clarkson U.	235	11	5	6	0
Marshall U.	235	11	8	0	3
U. Akron	235	11	3	8	0
U. Denver	235	11	8	3	0
U. Tulsa	235	11	3	8	0
Kennesaw State U.	240	10	9	1	0
Tuskegee U.	240	10	7	3	0
West Virginia State U.	240	10	10	0	0
American U.	243	9	9	0	0
East Tennessee State U.	243	9	3	0	6
Louisiana Tech U.	243	9	1	8	0
Northeastern Ohio Universities, C. of Medicine	243	9	7	0	2
U. Nebraska, Omaha	243	9	9	0	0
Wright State U.	243	9	7	2	0
Cleveland State U.	249	8	8	0	0
U. Massachusetts, Dartmouth	249	8	8	0	0
Fordham U.	251	7	7	0	0

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
Montana Tech of U. Montana	251	7	7	0	0
Texas Christian U.	251	7	6	0	1
Western Washington U.	251	7	7	0	0
Bowling Green State U.	255	6	6	0	0
Naval Postgraduate School	255	6	3	3	0
New School	255	6	6	0	0
U. Guam	255	6	5	0	1
U. Missouri, Saint Louis	255	6	6	0	0
U. Puerto Rico, Rio Piedras	255	6	6	0	0
U. San Diego	255	6	6	0	0
Idaho State U.	262	5	5	0	0
Rosalind Franklin U. of Medicine and Science	262	5	5	0	0
Smith C.	262	5	5	0	0
Texas A&M U.-Kingsville	262	5	4	1	0
U. Alaska, Anchorage	262	5	3	1	1
U. North Carolina, Wilmington	262	5	5	0	0
Alfred U.	268	4	0	4	0
Charles R. Drew U. of Medicine and Science	268	4	4	0	0
Florida A&M U.	268	4	2	2	0
Florida Institute of Technology	268	4	4	0	0
Illinois State U.	268	4	4	0	0
Miami U.	268	4	4	0	0
Midwestern U.	268	4	1	0	3
Robert Morris U.	268	4	0	4	0
South Dakota School of Mines and Technology	268	4	0	4	0
SUNY, C. of Optometry	268	4	4	0	0
Wichita State U.	268	4	3	1	0
Alabama A&M U.	279	3	3	0	0
CUNY, Brooklyn C.	279	3	3	0	0
Embry-Riddle Aeronautical U.	279	3	0	3	0
Hampton U.	279	3	3	0	0
Lincoln U.	279	3	3	0	0
Mercer U.	279	3	3	0	0
Texas Southern U.	279	3	0	0	3
Trinity C., Hartford	279	3	3	0	0
U. Central del Caribe	279	3	3	0	0

TABLE 5-5

Institutional rankings for postdoctoral appointees: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. New Orleans	279	3	3	0	0
U. North Florida	279	3	0	3	0
Western U. of Health Sciences	279	3	1	0	2
Clark U.	291	2	2	0	0
CUNY, C. Staten Island	291	2	2	0	0
Florida Gulf Coast U.	291	2	2	0	0
Loyola Marymount U.	291	2	2	0	0
Murray State U.	291	2	2	0	0
Norfolk State U.	291	2	0	2	0
Southern U.	291	2	2	0	0
Tennessee Technological U.	291	2	1	1	0
Texas A&M U., San Antonio	291	2	2	0	0
Toyota Technological Institute, Chicago	291	2	2	0	0
U. Alaska, Southeast	291	2	2	0	0
U. Arkansas, Pine Bluff	291	2	2	0	0
U. of the Pacific	291	2	1	0	1
Albany C. of Pharmacy and Health Sciences	304	1	0	0	1
Arkansas State U.	304	1	1	0	0
California State U., Monterey Bay	304	1	1	0	0
Duquesne U.	304	1	1	0	0
Hofstra U.	304	1	0	1	0
James Madison U.	304	1	1	0	0
New England C. of Optometry	304	1	1	0	0
Seton Hall U.	304	1	1	0	0
U. Dallas	304	1	1	0	0
U. New England	304	1	0	0	1
Williams C.	304	1	1	0	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

Note(s):

Tied institutions are ranked alphabetically. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
All institutions ^a	-	34,342	20,600	4,575	9,167
U. Wisconsin-Madison	1	1,546	810	93	643
Harvard U.	2	1,182	536	53	593
U. California, Davis	3	1,159	797	229	133
U. Colorado	4	932	690	73	169
U. California, San Diego	5	899	368	112	419
Columbia U. in the City of New York	6	887	499	88	300
Stanford U.	7	877	430	98	349
U. California, Los Angeles	8	835	424	57	354
U. Illinois, Chicago	9	811	177	36	598
U. Minnesota	10	680	367	98	215
U. Arizona	11	654	529	57	68
Georgia Institute of Technology	12	600	171	429	0
U. Washington	13	589	358	31	200
Washington U., Saint Louis	14	567	224	10	333
U. Pennsylvania	15	546	208	6	332
U. California, Berkeley	16	531	419	76	36
Ohio State U.	17	509	197	87	225
Indiana U.	18	501	295	7	199
U. Maryland, The	19	487	388	79	20
Duke U.	20	482	270	60	152
Cornell U.	21	455	310	58	87
U. Iowa	22	438	184	52	202
Northwestern U.	23	394	138	36	220
U. Miami	24	375	185	6	184
North Carolina State U.	25	374	277	85	12
U. Chicago	25	374	213	14	147
U. North Carolina, Chapel Hill	27	333	226	2	105
U. Michigan	28	322	145	58	119
Princeton U.	29	321	254	67	0
New York U.	30	309	139	8	162
Texas A&M U.	30	309	283	8	18
U. California, Irvine	30	309	160	38	111
California Institute of Technology	33	293	264	29	0
City of Hope, Irell and Manella Graduate School of Biological Sciences	34	281	281	0	0
U. Alabama, Birmingham	35	274	109	9	156

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
Emory U.	36	261	95	12	154
U. Oregon	37	246	218	0	28
Arizona State U.	38	245	181	53	11
Case Western Reserve U.	39	242	142	29	71
Oregon Health and Science U.	40	240	87	6	147
U. Oklahoma	41	239	185	25	29
U. South Florida, Tampa	42	233	186	19	28
U. Kansas	43	221	124	10	87
Colorado State U., Fort Collins	44	216	175	35	6
Purdue U.	45	213	85	111	17
Virginia Polytechnic Institute and State U.	46	209	151	56	2
U. California, Santa Barbara	47	208	172	36	0
U. Cincinnati	48	207	24	2	181
U. Virginia	49	201	123	24	54
Boston U.	50	200	88	56	56
Georgetown U.	51	199	160	0	39
U. Louisiana, Lafayette	52	195	64	100	31
U. Maryland, Baltimore County	53	186	181	5	0
Rockefeller U.	54	179	179	0	0
U. Illinois, Urbana-Champaign	55	178	134	39	5
West Virginia U.	55	178	114	28	36
U. Nevada, Reno	57	173	126	24	23
Brown U.	58	172	161	5	6
U. Southern California	59	171	81	21	69
U. Pittsburgh	60	164	62	13	89
Old Dominion U.	61	157	112	43	2
Vanderbilt U.	62	155	64	16	75
U. Missouri, Columbia	63	152	113	9	30
Oregon State U.	64	146	124	14	8
U. California, Santa Cruz	65	143	138	5	0
Northeastern U.	66	138	92	36	10
George Mason U.	67	135	90	32	13
Iowa State U.	68	134	107	26	1
Utah State U.	69	129	40	86	3
Montana State U.	70	125	95	30	0
U. Louisville	71	124	31	19	74

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
Brandeis U.	72	116	116	0	0
U. Dayton	72	116	99	17	0
Texas Tech U.	74	106	69	26	11
U. Idaho	75	105	97	8	0
U. Texas, San Antonio	75	105	98	6	1
Scripps Research Institute	77	104	104	0	0
U. Hawaii, Manoa	78	103	101	2	0
Clemson U.	79	102	64	33	5
Wayne State U.	80	100	65	6	29
U. Utah	81	97	74	17	6
Tufts U.	82	96	90	5	1
Rice U.	83	95	68	26	1
SUNY, Stony Brook U.	83	95	58	9	28
San Diego State U.	85	94	69	8	17
U. Maine	86	93	59	32	2
Michigan State U.	87	91	82	2	7
Florida Atlantic U.	88	90	71	6	13
Catholic U. of America	89	88	82	6	0
Morgan State U.	89	88	71	9	8
U. Rochester	89	88	52	6	30
Michigan Technological U.	92	86	32	54	0
U. California, Riverside	93	85	73	11	1
Sanford-Burnham Medical Research Institute, La Jolla	94	80	80	0	0
U. Nebraska-Lincoln	95	79	72	7	0
Oklahoma State U.	96	76	58	18	0
Medical C. Wisconsin	97	73	23	0	50
U. Montana	97	73	56	0	17
U. Alabama, Huntsville	99	71	53	18	0
U. Toledo	100	70	46	7	17
SUNY, U. Albany	101	69	66	2	1
U. Tennessee, Knoxville	101	69	33	33	3
U. Wyoming	103	67	49	17	1
Woods Hole Oceanographic Institution	103	67	49	18	0
Van Andel Research Institute	105	66	66	0	0
George Washington U.	106	62	26	9	27
U. Texas Health Science Center, San Antonio	107	60	41	0	19

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Arkansas, Fayetteville	108	59	51	8	0
U. North Dakota	108	59	12	42	5
North Dakota State U.	110	58	49	8	1
Carnegie Mellon U.	111	56	30	26	0
Medical U. South Carolina	112	55	27	0	28
U. New Hampshire	112	55	53	1	1
U. Texas, Dallas	112	55	36	18	1
Drexel U.	115	54	31	11	12
U. Houston	116	53	41	5	7
Louisiana State U.	117	52	40	9	3
Mercer U.	117	52	23	27	2
U. Missouri, Kansas City	117	52	25	8	19
U. Nevada, Las Vegas	120	50	30	6	14
Kansas State U.	121	49	45	2	2
Boston C.	122	46	38	0	8
U. Mississippi	122	46	3	12	31
Claremont Graduate U.	124	45	44	0	1
SUNY, U. Buffalo	124	45	25	5	15
New Mexico State U.	126	42	38	2	2
Auburn U.	127	41	28	11	2
Augusta U.	128	39	26	0	13
U. Alabama, Tuscaloosa	128	39	22	17	0
U. Massachusetts, Amherst	128	39	33	5	1
U. Memphis	128	39	28	5	6
U. Wisconsin-Milwaukee	128	39	29	6	4
Tulane U.	133	38	32	1	5
Ohio U.	134	37	24	8	5
Rutgers, State U. New Jersey	134	37	28	5	4
U. Georgia	134	37	34	1	2
Wake Forest U.	137	36	16	7	13
Florida International U.	138	35	24	11	0
U. Texas, Arlington	138	35	6	24	5
CUNY, City C.	140	33	18	15	0
U. Texas, El Paso	140	33	18	11	4
Howard U.	142	32	17	1	14
Colorado School of Mines	143	30	9	21	0

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
Kent State U.	143	30	26	1	3
Boise State U.	145	28	13	13	2
Lehigh U.	145	28	10	18	0
Missouri U. of Science and Technology	145	28	12	16	0
U. Denver	145	28	27	1	0
Texas State U.	149	26	25	1	0
U. Central Florida	150	25	20	5	0
U. Delaware	150	25	20	5	0
Florida State U.	152	24	23	1	0
Northern Illinois U.	152	24	24	0	0
U. Tennessee, Health Science Center	152	24	13	0	11
Portland State U.	155	21	15	6	0
North Carolina Agricultural and Technical State U.	156	20	15	5	0
U. New Mexico	156	20	18	2	0
U. Rhode Island	156	20	17	0	3
U. California, Merced	159	19	10	9	0
U. North Carolina, Charlotte	159	19	16	3	0
U. Vermont	159	19	8	2	9
Baylor U.	162	18	16	1	1
Miami U.	162	18	15	3	0
Northern Arizona U.	162	18	15	0	3
U. Southern Mississippi	162	18	13	3	2
Johns Hopkins U.	166	17	10	0	7
Nova Southeastern U.	166	17	12	0	5
South Dakota School of Mines and Technology	166	17	0	17	0
U. Alaska, Fairbanks	166	17	17	0	0
U. Texas Rio Grande Valley	166	17	11	4	2
Pennsylvania State U.	171	16	12	3	1
William and Mary	171	16	16	0	0
U. South Carolina	173	15	8	0	7
Rochester Institute of Technology	174	14	11	3	0
Southern Methodist U.	174	14	14	0	0
Texas A&M U.-Corpus Christi	174	14	14	0	0
U. North Texas, Denton	174	14	12	2	0
Dartmouth C.	178	13	10	3	0
Marquette U.	178	13	6	5	2

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
U. Massachusetts, Lowell	178	13	10	3	0
Florida A&M U.	181	12	5	1	6
Mississippi State U.	181	12	10	2	0
Smith C.	181	12	12	0	0
U. Puerto Rico, Rio Piedras	181	12	12	0	0
Wichita State U.	181	12	3	9	0
Albert Einstein C. of Medicine	186	11	6	0	5
Rowan U.	186	11	10	1	0
Worcester Polytechnic Institute	186	11	5	6	0
South Dakota State U.	189	10	10	0	0
U. Massachusetts, Dartmouth	189	10	10	0	0
California State U., Long Beach	191	9	5	3	1
Clark U.	191	9	9	0	0
Florida Institute of Technology	191	9	5	4	0
Midwestern U.	191	9	5	0	4
San Francisco State U.	191	9	9	0	0
Tennessee State U.	191	9	7	1	1
U. Puerto Rico, Medical Sciences Campus	191	9	7	0	2
Chapman U.	198	8	7	0	1
Clarkson U.	198	8	1	7	0
Texas Christian U.	198	8	8	0	0
Wright State U.	198	8	6	2	0
Loyola Marymount U.	202	7	7	0	0
Marshall U.	202	7	4	2	1
Southern Illinois U., Carbondale	202	7	7	0	0
SUNY, C. of Environmental Science and Forestry	202	7	7	0	0
U. South Alabama	202	7	7	0	0
California State U., Fullerton	207	6	6	0	0
Louisiana Tech U.	207	6	2	4	0
Rosalind Franklin U. of Medicine and Science	207	6	6	0	0
Syracuse U.	207	6	6	0	0
Western Michigan U.	207	6	4	2	0
U. Wisconsin-Stevens Point	212	5	5	0	0
Ball State U.	213	4	4	0	0
Southern U.	213	4	4	0	0
SUNY, C. of Optometry	213	4	4	0	0

TABLE 5-6

Institutional rankings for doctorate-holding nonfaculty researchers: 2023

(Number)

Institution	Rank	Total	Science	Engineering	Health
Texas A&M U.-Kingsville	213	4	4	0	0
Texas Southern U.	213	4	0	0	4
U. Akron	213	4	2	2	0
U. North Carolina, Wilmington	213	4	4	0	0
U. Tulsa	213	4	0	4	0
Virginia Commonwealth U.	213	4	4	0	0
Western Washington U.	213	4	4	0	0
Albany C. of Pharmacy and Health Sciences	223	3	0	0	3
Keck Graduate Institute	223	3	3	0	0
Kennesaw State U.	223	3	3	0	0
U. Guam	223	3	3	0	0
U. South Dakota	223	3	3	0	0
Charles R. Drew U. of Medicine and Science	228	2	2	0	0
Christopher Newport U.	228	2	2	0	0
Colorado State U., Pueblo	228	2	2	0	0
Embry-Riddle Aeronautical U.	228	2	0	2	0
Montana Tech of U. Montana	228	2	2	0	0
Tuskegee U.	228	2	2	0	0
U. Connecticut	228	2	2	0	0
Western U. of Health Sciences	228	2	2	0	0
Cleveland State U.	236	1	1	0	0
CUNY, C. Staten Island	236	1	1	0	0
Monmouth U.	236	1	1	0	0
Morehouse School of Medicine	236	1	1	0	0
Norfolk State U.	236	1	1	0	0
U. Alaska, Anchorage	236	1	1	0	0

^a Totals for "all institutions" include data imputed for nonresponding institutions; data imputed for nonresponding institutions are not shown separately.

Note(s):

Tied institutions are ranked alphabetically. For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

Technical Notes

Survey Overview (2023 Survey Cycle)

Purpose. The Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) is an annual census of all academic institutions in the United States and its territories (Guam and Puerto Rico) granting research-based master's degrees or doctorates in science, engineering, and selected health (SEH) fields as of the fall of the survey year. Sponsored 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), the GSS collects counts of graduate students, postdoctoral researchers (postdocs), and doctorate-holding nonfaculty researchers (NFRs) at these institutions by field, demographic characteristics, and other characteristics, such as source and mechanism of financial support. Results are used to assess shifts in graduate enrollment, shifts in postdoc and NFR appointments, and trends in financial support.

Data collection authority. The information collected by the GSS is solicited under the authority of the National Science Foundation Act of 1950, as amended, and the America COMPETES Reauthorization Act of 2010. The Office of Management and Budget (OMB) control number is 3145-0062 and expires on 30 September 2026. The disclosure review number is NCSES-DRN24-043.

Survey contractor. RTI International.

Survey sponsors. NCSES and NIH.

Key Survey Information

Frequency. Annual.

Initial survey year. 1966.

Reference period. Fall 2023.

Response unit. Organizational units (e.g., academic departments, degree-granting programs, university-affiliated research centers, and health care facilities) in academic institutions.

Sample or census. Census.

Population size. A total of 22,802 organizational units at 687 academic institutions.

Sample size. Not applicable.

Survey Design

Target population. The survey target population is all academic institutions in the United States and its territories (Guam and Puerto Rico) that grant research-based master's or doctorate degrees in SEH fields. A research-based graduate degree program requires the training in, and conducting of, independent research as part of the curriculum. SEH fields are defined using the Integrated Postsecondary Education Data System (IPEDS) Classification of Instructional Programs (CIP) codes. This population includes branch campuses, affiliated research centers and health facilities, and separately organized components, such as medical or dental schools, schools of nursing, and schools of public health.

In 2023, the survey universe included 687 institutions with 770 schools and 22,802 organizational units. There were 501 schools and 20,994 units within 418 institutions awarding master's or doctoral degrees and 269 schools and 1,808 units within 269 institutions that award only master's degrees. Data were collected at the organizational-unit level. Detailed information on the changes to the survey universe and final number of institutions, schools, and units is provided in [table A-1](#) through [table A-5b](#).

Sampling frame. The total universe in 2023 included 22,802 units at 687 academic institutions in the United States that granted research-based master's degrees or doctorates in SEH fields. Eligible academic institutions are identified primarily through IPEDS.

Sample design. The GSS is a census.

Data Collection and Processing Methods

Data collection. The survey data are collected through coordinators at eligible institutions. Coordinators are assigned by their institution and are responsible for identifying all GSS-eligible units, collecting the requested data, and submitting the data to the survey contractor. GSS eligibility for SEH units is determined by the CIP code associated with the organizational unit. The GSS maintains a crosswalk between CIP codes and eligible SEH fields.

Coordinators query their institutional databases and report data through a file upload. Those unable to provide file uploads can manually enter data into the GSS Web survey. In cases where coordinators are unable to obtain the requested data, coordinators may enlist the aid of others (unit respondents) in their reporting activity. Unit respondents are most commonly used to report detailed financial support data. Institutions may assign multiple coordinators. For example, an institution may have one coordinator for each school within the institution or may have separate coordinators for graduate student data and for postdoc and NFR data. When a new coordinator is needed, the president's office at the institution is asked to designate as coordinator the person most knowledgeable about the graduate student or postdoc data.

Once coordinators are confirmed, they are provided access to the GSS Web survey. On request, hard copies of the survey worksheets and GSS-eligible code lists are also e-mailed to each coordinator as reference. Data are collected at the organizational-unit level (e.g., departments, degree-granting programs, research centers, and health facilities) and include field of study, demographic characteristics, and funding information for graduate students and postdocs.

Mode. Electronic data interchange is the primary mode of data submission. Coordinators unable to use this method could manually enter their data in the GSS Web survey.

Response rates. Response rates are calculated based on responses to the survey's various data collection grids (graduate student and postdoc counts, by ethnicity and race; full-time graduate student and postdoc counts, by primary source or mechanism of support; counts of postdocs, by type of doctoral degree and primary mechanism of support; counts of postdocs, by type of doctoral degree and citizenship; counts of postdocs, by origin of doctoral degree; and counts of NFRs, by type of doctoral degree and sex).

- *Unit response.* In 2023, the GSS received complete responses from 18,891 of the 22,802 eligible organizational units (82.8%). An additional 3,417 organizational units (15.0%) were partial respondents. The remaining 494 organizational units (2.2%) were nonrespondents.
- *School response.* Of the 770 eligible schools, 726 schools (94.3%) were complete respondents, 10 schools (1.3%) were partial respondents, and 34 schools (4.4%) were nonrespondents.
- *Institutional response.* Institutional response rates were calculated using the same criteria for schools. Of the 687 eligible institutions, 651 institutions (94.8%) were complete respondents, 5 institutions (0.7%) were partial respondents, and 31 institutions (4.5%) were nonrespondents.

Data editing. Data quality is ensured by interactive edit checks built into the Web survey and by a comprehensive review after the coordinator submits the data. Data collection grids in the Web survey are prefilled with zeros. Respondents are asked to mark a checkbox if the unit does not have eligible data to report. If uploaded data for a unit contain only one type of student (e.g., the unit has master's students but no doctoral students), the appropriate checkbox indicating no students to report is autofilled by the system for the relevant grid. Grids with a marked checkbox contributed to a complete response for the unit. Grids with unchanged, prefilled zeros and an unmarked checkbox disqualified the unit from complete response status.

The Web survey contains edit checks to verify that the data entered are internally consistent and within an expected range, often based on the respondent's prior-year data. In 2017, aggregate school-level edit checks were introduced, replacing unit-level checks. Reported aggregate school-level data are compared to the previous year for part-time, full-time, and first-time, full-time students as well as for postdoc and NFR counts. The survey contractor reviews all data submitted by institutions to ensure that data fields are complete and internally consistent. The data collection team conducts a post-submission data review, whereby coordinators are asked to explain the discrepancy whenever counts differ substantially from those of the previous year. Follow-up with coordinators is also conducted when counts remain identical to the previous year and when there are notable changes to a school's unit list, including unit additions and deletions, changes to the highest-degree-granted status, GSS code, or unit name.

On the basis of follow-up contacts, necessary revisions are made directly in the Web survey by the coordinator, unit respondents, or the survey contractor at the direction of the coordinator. See section "[Survey Quality Measures](#)" below for a discussion of the types of measurement error detected in the data review and follow-up process.

Imputation. The 2023 GSS collected 543 data items related to enrollment and financial support for master's and doctoral full-time and part-time students, postdocs, and NFRs. Of the 543 data items collected in the GSS, the item imputation rates ranged from 1.52% to 6.71%. All missing data were imputed.

Different imputation techniques were used for units with and for those without comparable historical data. For units missing a key total (total full-time master's, full-time doctoral, part-time master's, and part-time doctoral students; total postdocs; or total NFRs) with at least 1 year of qualified historical data, a carry-forward imputation method was used. Inflation factors were calculated for the six key totals to account for year-to-year change. The previous year's key totals were carried forward as the imputed values for the current year's key totals and imputed according to the previous year's proportions.

For units that reported totals but no details, details were imputed according to the prior distribution if qualified historical details were available. Otherwise, a nearest-neighbor imputation method was used. In this method, a donor unit that was "nearest" to the unit whose data were being imputed (imputee) was identified among all responding units having similar characteristics as the imputee (e.g., having the same GSS code for program fields and offering a doctoral degree).

Similarly, when postdoc or NFR details were imputed, the total number of postdocs or NFRs, respectively, was used to choose the nearest neighbor. If the postdoc or NFR total was missing, the graduate student totals were used to select the nearest neighbor to impute the postdoc or NFR variables. If either the postdoc or NFR key total (or both) was missing, other available key totals were used to select the nearest neighbor to impute the data. The same donor was then used to impute the details corresponding to the imputed key totals.

For institutions or schools that did not respond, all data at the unit level were imputed. For these institutions or schools, if prior unit-level data were available, counts were carried forward; if no prior data were available, then the nearest-neighbor imputation method was used.

Detailed information on the institutions, schools, units, fields, response rates, imputation rates, and a crosswalk between the 2023 CIP codes and the GSS codes are provided in 17 technical tables for the 2023 GSS, which includes two tables with information on the GSS taxonomy.

Weighting. Not applicable.

Variance estimation. Not applicable.

Survey Quality Measures

Sampling error. Not applicable because the GSS is a census.

Coverage error. Due to the availability of comprehensive lists of the master's- and doctorate-granting institutions in the United States and the high level of participation in the survey of the eligible institutions, coverage error is minimal. The universe of higher education institutions is reviewed annually to identify potentially eligible institutions. Sources for this review include IPEDS, the Carnegie Classification of Institutions of Higher Education, the Higher Education Directory, the NCSES Higher Education Research and Development Survey, and professional association membership lists.

Nonresponse error. The GSS typically has high response rates. In 2023, 97.8% of units provided complete or partial data and the overall institutional response rate was 95.5%. Of the 543 data items collected in the GSS, the item imputation rates ranged from 1.5% to 6.7%. All missing data are imputed.

Measurement error. The GSS is subject to measurement error that arises when variables of interest cannot be measured accurately or precisely. Review of the data, cognitive interviews, usability tests, pilot tests, site visits, and other methodological activities with the institutions have pointed to several possible sources of measurement error. The types of measurement errors listed below are believed to have a minimal impact on data quality.

- *Double counting.* Anecdotal evidence indicates some misreporting may occur when an institution has more than one coordinator or offers joint programs. To reduce double counting, facilitate communication, and allow sharing of reported data, a screen in the Web survey provides names and contact information for all coordinators at the institution. Interactive and post-submission checks are also used to confirm that similarly named units within institutions are distinct eligible units. The introduction of data uploads has minimized this type of measurement error. This issue is now flagged for fewer than 0.5% of units reported to the GSS annually.
- *Inclusion of practitioner degrees.* Graduate students working toward practitioner degrees, particularly in health fields with explicit exclusions, may sometimes be overreported. Starting with the 2007 survey cycle, survey materials indicated that students should be excluded from the counts if they are pursuing DDS or MD degrees or master's and certain other degrees in specified fields. During the imputation process—and to be conservative in the absence of other information—new units that were suspected of having reported graduate students in excluded degree-field programs based on the GSS code were set to having zero graduate students. In the 2011 survey cycle, checks were built into the Web survey to remind respondents to exclude students pursuing practitioner-based degrees. The 2017 redesign included a requirement that coordinators confirm via a pop-up dialog that they excluded practitioner degrees from the data provided in their upload files. Prior to the introduction of this pop-up dialog, it was more common to mistakenly include graduate students earning practitioner degrees. However, since the redesign in 2017, fewer than 0.5% of units that report doctoral students mistakenly included students pursuing practitioner degrees.
- *Difficulty in reporting source and mechanism of support.* Feedback from respondents and methodological research indicates that financial support data are often difficult for respondents to report. The information may not be stored in one centralized database; financial support may not always be channeled through the institution (e.g., self-support); and foreign sources of support may not always be known. Respondents may also have difficulty categorizing financial information by field, such as when a student is enrolled in one unit but receives support from another. Therefore, these data may be more prone to measurement error than other survey data items. Finally, institutions define mechanisms of support differently (e.g., fellowships vs. traineeships) and may report individuals according to the institution's definition rather than that provided by the GSS. Beginning with the 2010 survey, the postdoc grids include "unknown" categories. For additional information about nonresponse and imputation, see [table A-10](#).
- *Difficulty in reporting postdocs and NFRs.* Many respondents indicate in the Web survey that they are unable to provide data on their units' postdocs or NFRs because they do not know all of the units that employ postdocs and NFRs. Starting with the 2010 survey cycle, schools were given the option of appointing a separate postdoc coordinator who may be more knowledgeable about a school's postdocs or NFRs to provide these data. In 2018, coordinators were given the ability to indicate that they had postdocs or NFRs but were unable to report them.

Data Comparability

Changes in survey coverage and population.

- *Eligibility and fields of study.*

2020: Starting in the GSS 2020, the list of GSS-eligible CIP codes was updated to align with the revised 2020 CIP list and NCSES Taxonomy of Disciplines (TOD). Since most coordinators report graduate student data using CIP, it was important that the GSS update the taxonomy to include the new CIP codes on the same timeline as IPEDS. As part of this update, new CIP codes were added, some CIP codes were changed, and a small number of CIP codes were removed. Most of the changes in CIP eligibility were made to ensure that the implementation of the new CIP codes included programs that were GSS-eligible and likely were being reported (based on unit names). GSS codes of data science and data analytics and of medical clinical sciences were added for reporting new CIP codes in these fields. Due to changes in the CIP and TOD, veterinary biomedical and clinical sciences were moved from other health to agricultural sciences (renamed agricultural and veterinary sciences). To improve alignment with the TOD, human development moved from social sciences to psychology.

In addition to the adjustments made due to the changes in CIP and TOD, the GSS made additional changes based on data reporting patterns that emerged due to the 2017 redesign. Generally, these changes created more detailed fields out of larger GSS codes or reorganized existing codes to align with current enrollment patterns. Broad fields were added to engineering for the first time. In some cases, GSS codes with a small number of graduate students were combined for reporting purposes. For more information on these changes, see [GSS 2020: tables A-17, A-18a, and A-18b](#).

2017: The list of GSS-eligible disciplinary fields was updated in 2017 to align with the TOD. Among the major changes in the update: several fields became ineligible—architecture, communications, and public administration; portions of nutrition and of family and consumer sciences and human sciences also became ineligible. Several fields changed names. A new broad field titled natural resources and conservation was split from agricultural sciences. Computer sciences was split into three fields, and the biological and biomedical sciences field was reorganized. The taxonomy changes resulted in previously reported units being split across separate GSS codes or moving between codes or broad fields. For more information on the 2017 taxonomy updates, see [GSS 2017: table A-1](#).

2014: The survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in SEH. Eligible units at 151 newly eligible institutions were added, and 2 private, for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible. An additional 4 institutions dropped out of the data collection in 2014 because they no longer grant graduate degrees in SEH fields, 2 merged with previously eligible institutions, and 1 began reporting data under another institution. As a result, the total number of institutions included in the GSS increased from 564 in 2013 to 706 in 2014. The total net increase in the number of GSS-eligible units was 826, rising to 14,845 in 2014 from 14,019 in 2013. See [GSS 2014: table A-1](#).

For more information on the survey frame update, see the Special Report [Assessing the Impact of Frame Changes on Trend Data from the Survey of Graduate Students and Postdoctorates in Science and Engineering](#).

- *Eligibility and degree-granting status.*

Institutions are classified as doctorate-granting if at least one GSS-eligible unit confers doctoral degrees. In 2023, three institutions became ineligible for the GSS. No institutions merged into a single institution in the 2023 survey cycle. In addition, 9 institutions changed GSS degree-granting status: 4 from doctorate-granting to master's-granting institutions, and 5 from master's-granting to doctorate-granting institutions. As a result, the total number of institutions included in the GSS decreased from 690 in 2022 to 687 in 2023 (see [table A-2](#) for details on institutional status and [table A-3](#) for overall number of institution counts).

Changes in survey content.

- *Sex.*

2010: Began collecting ethnicity, race, and citizenship data on postdocs by sex and began collecting type of doctoral degree data on NFRs by sex.

2008: Began collecting the number of first-time, full-time male graduate students by ethnicity and race; full-time male graduate students by source of support; male postdocs by source of support; and male NFRs. Previously, the number of men was inferred by subtracting the number of women from the total.

- *Ethnicity and race.*

2010: Began collecting ethnicity and race data for postdocs who are U.S. citizens and permanent residents using the same categories as used for graduate students.

2008: Revised ethnicity and race categories to correspond to IPEDS by combining "Hispanic/Latino, one race only" and "Hispanic/Latino, more than one race" categories into "Hispanic or Latino (one or more races)."

- *Citizenship.*

2010: Began collecting citizenship data on postdocs using the same categories that are used for graduate students. In previous years, only counts of postdocs who are foreign nationals holding temporary visas were collected.

2008: Clarification made for "non-U.S. citizens" to exclude non-U.S. citizens residing outside of the United States who are enrolled in an online degree program at a U.S. institution.

- *Financial support.*

2010: Began collecting data on the largest source of financial support and on the largest mechanism of support separately for postdocs. For mechanism of support, "nonfederal sources" was replaced with "other support."

2008: Graduate student data no longer collected for NIH teaching assistantships because NIH does not offer financial support for students through this mechanism.

2008: Began collecting the number of full-time graduate students whose largest source of support came from a non-U.S. source via teaching assistantship.

- *Degree level.*

2017: Began separate collection of demographic and financial data by master's and doctoral students.

- *Doctoral degree.*

2010: Began collecting more detailed information on postdocs' and NFRs' doctoral degree type. Categories were added for those holding a doctoral degree (e.g., PhD, ScD, DEng), a professional degree (e.g., MD, DVM, DO, DDS), and dual degrees (e.g., MD-PhD, DVM-PhD) as well as for those whose type of degree was unknown. In previous years, the GSS collected degree-type information by asking respondents to indicate how many of the total number of postdocs (or NFRs) had MD, DO, DDS, or DVM degrees. This number was used to estimate the number of postdocs (or NFRs) with medical degrees; the number with research degrees was estimated as the difference between the total counts and the counts of those with medical degrees.

2010: Began collecting postdocs' doctoral degree type by citizenship and by country of origin (United States, foreign, unknown) of doctoral degrees. Also began collecting NFRs' doctoral degree type by sex.

Changes in survey procedures.

2017: Coordinators were asked to report master's and doctoral student data separately and to use CIP codes to categorize their organizational units when reporting student data. Coordinators could report organizational units with postdocs and NFRs using either CIP or GSS codes. Two alternative methods for uploading GSS data were expected of coordinators in 2017. The first option enabled coordinators to utilize an Excel template file to construct a de-identified, individual-level data file. This file could then be uploaded directly into the Web survey. The second option enabled the coordinator to aggregate the individual-level data to the unit level using an Excel macro provided in the template file rather than transmit any individual-level data. A manual data entry option was available to those unable to provide an uploaded file. Coordinators had access to data file templates, a sample SQL SELECT statement containing all GSS-eligible CIP codes that could be used to query their information systems, online training videos, and additional support from the survey contractor on the new data collection changes.

Coordinators could continue to use unit respondents to provide part or all of the data request. Organizational units that reported using CIP codes were automatically re-coded to the updated GSS taxonomy by the Web instrument. Coordinators reporting data using the GSS rather than CIP codes were asked to re-code their organizational units to the updated GSS taxonomy.

2010: Significant effort was made to ensure that appropriate personnel were providing postdoc and NFR data. As a result, it is unclear how much of the increase reported in 2010 represented actual growth in postdocs and how much resulted from improved data collection. For information on the improved data collection and changes in postdoc data, see [Counts of Postdoctoral Appointees in Science, Engineering, and Health Rise with Reporting Improvements](#); for changes in NFR data, see [Examining the Reporting of Nonfaculty Doctorate Researchers in the Survey of Graduate Students and Postdoctorates in Science and Engineering](#).

Historical changes. Changes have been made over the years to the coverage and content of the GSS to keep it relevant to the needs of data users. Such changes impact analysis of trend data, so data comparisons across years should be made with caution. This is especially true for counts; however, proportions or shares are typically robust enough to allow for such comparisons.

In 2017, due to the taxonomy and data collection changes (described above), a set of bridge estimates was created to permit comparisons to previous years and for trend analyses. These estimates are labeled 2017old and are available at the broad field level for all combined graduate student variables as well as postdoc variables. Due to a large increase in counts attributable to prior underreporting, 2017old estimates are not available for NFR data. The data reported as 2017new use the updated GSS taxonomy and are comparable to 2018–21 data but are not comparable to data from prior years. Please note that in tables that compare data from 2017 to the present, 2017new data are used.

Due to the survey frame update, the data comparisons between 2014 and earlier years should use the 2014old data, and those between 2014 and 2016 should use the 2014new data. The impact of frame updates can be evaluated using the 2014old and 2014new data. For more information on the survey frame update, see the Special Report [Assessing the Impact of Frame Changes on Trend Data from the Survey of Graduate Students and Postdoctorates in Science and](#)

Engineering. For more information on the changes prior to 2010, see [Graduate Students and Postdoctorates in Science and Engineering: Fall 2009](#): "Technical Notes" section. For specific changes from the major survey redesign in 2007, see the [2007 report: "Technical Notes."](#)

Definitions

Degree level.

- **Master's degree.** A post-baccalaureate, research-focused degree; includes MA, MS, MAsC, and PSM in GSS-eligible disciplines.
- **PhD or PhD equivalent degree.** An advanced, research-focused academic degree—typically, the highest degree granted in a particular field; includes doctorates such as PhD, ScD, DSc, and DEng.

Enrollment status.

- **Full time and part time.** Coordinators were instructed to use their institution's definitions.
- **First time, full time.** Students enrolled for credit in a graduate degree program in an organizational unit for the first time in the fall semester of the survey year. This may include graduate students previously enrolled in another graduate degree program at the institution or at another institution and students who already hold another graduate or professional degree.

Ethnicity and race. The GSS uses definitions of ethnicity and race that are based on the OMB's *Standards for the Classification of Federal Data on Race and Ethnicity*.

- **Hispanic or Latino ethnicity (one or more races).**¹ All individuals of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. This category includes individuals who are Hispanic or Latino and any other race.
- **Not Hispanic or Latino.** Individuals who are not of Hispanic or Latino descent, regardless of race.
- **American Indian or Alaska Native.** A person of only one race having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.
- **Asian.** A person of only one race having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent—for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- **Black or African American.** A person of only one race having origins in any of the Black racial groups of Africa.
- **Native Hawaiian or Other Pacific Islander.** A person of only one race having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific islands.
- **White.** A person of only one race having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- **More than one race.** A person of two or more of the race categories listed above.
- **Unknown ethnicity or race.** A person whose ethnicity or race is unknown or not stated.

Graduate student mechanisms of financial support.

- **Fellowship.** A competitive award (often from a national competition) given to a graduate student that requires no work by the recipient.
- **Traineeship.** A financial award given to a graduate student selected by the institution.

- *Research assistantship*. A financial award given to a graduate student for which most of the student's responsibilities are devoted primarily to research.
- *Teaching assistantship*. A financial award given to a graduate student for which most of the student's responsibilities are devoted primarily to teaching assistant activities.
- *Other support*. All other mechanisms of support for graduate students.

Graduate student sources of financial support.

- *Federal sources*. Financial support provided by U.S. federal agencies. Excludes federally guaranteed student loans.
- *Nonfederal sources*. Financial support from state and local governments; support from the institution, such as tuition waivers and stipends; support from foreign sources, such as foreign governments, foreign firms, and agencies of the United Nations; and other U.S. sources, such as support from nonprofit institutions, private industry, and all other nonfederal U.S. sources.
- *Self-support*. Loans (including federal loans) or personal or family financial contributions.

Historically Black colleges and universities (HBCUs). Institutions of higher education that were established prior to 1964 and whose principal mission was, and is, the education of Black Americans. The list of HBCUs is maintained by the White House Initiative on HBCUs (<https://sites.ed.gov/whhbcu/>).

Nonfaculty researchers (NFRs). All doctorate-holding researchers who (1) are not considered either postdocs or members of the faculty and (2) are involved principally in SEH research activities. Also referred to as *Other doctorate-holding NFRs*.

Postdoctoral researchers (postdocs). The definition of a postdoc varies by institution. Respondents were instructed to use their institution's definition. NCSSES defines a postdoc as meeting both of the following qualifications: (1) holds a recent doctoral degree, generally awarded within the past 5–7 years, such as PhD or equivalent (e.g., ScD, DEng), or first-professional degree in a medical or related field (e.g., MD, DDS, DO, DVM), or foreign degree equivalent to a U.S. doctoral degree; and (2) has a limited-term appointment, generally no more than 5–7 years, primarily for training in research or scholarship, and working under the supervision of a senior scholar in a unit affiliated with the institution.

Postdoc mechanisms of financial support.

- *Traineeship*. A financial award given to a postdoc selected by the institution.
- *Research grant*. A financial assistance award given to an organization or an individual postdoc that supports specific research goals.
- *Other support*. All other mechanisms of support for postdocs.

Postdoc sources of financial support.

- *Federal sources*. Financial support provided by U.S. federal agencies.
- *Nonfederal sources*. Financial support from state and local governments; support from the institution; support from foreign sources, such as foreign governments, foreign firms, and agencies of the United Nations; and support from other U.S. sources, such as nonprofit institutions, private industry, and all other nonfederal U.S. sources.
- *Personal resources*. Personal and family financial resources, including federal and other loans.
- *Unknown or not stated*. Sources of financial support for the postdoc are unknown or cannot be determined.

Notes

1 The OMB standards designate Hispanics as an ethnic group rather than a racial group. Following these standards, Hispanic is not counted as a race in the GSS. Cognitive interviews with respondents showed this was a source of considerable confusion. For example, prior to 2008 Black Hispanics and White Hispanics could be counted as “Hispanic, More than one race” rather than “Only one race, Hispanic.” The ethnicity and race categories were aligned to IPEDS by combining the “Hispanic/Latino, More than one race” and “Hispanic/Latino, One race only” categories. In 2008, these two Hispanic categories were collapsed into one: “Hispanic or Latino ethnicity (one or more races).”

Technical Tables

Table	Title
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A-1	Changes in the organizational unit listing: 2021–23
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A-2	Changes in the institution status: 2022–23
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A-3	Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2023
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Science, engineering, and health organizational units

Table	Title
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A-4	Science, engineering, and health organizational units with graduate student enrollment, by detailed field: 2021–23
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A-5a	Science, engineering, and health organizational units with doctorate-holding nonfaculty researchers, by detailed field: 2021–23
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A-5b	Science, engineering, and health organizational units with postdoctoral appointees, by detailed field: 2021–23
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A-6	Response rates for science, engineering, and health organizational units: 1975–2023
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Imputation, by field and graduate enrollment, postdoctorate, or doctorate-holding nonfaculty researcher status: 2021–23

Table	Title
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A-7	Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2021–23
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A-8	Imputation for nonresponse in totals for postdoctoral appointees and doctorate-holding nonfaculty researchers, by field: 2021–23
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Imputation for graduate students, postdoctoral appointees, and doctorate-holding nonfaculty researchers in science, engineering, and health fields: 2023

Table	Title
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A-9	Imputation for graduate students in science, engineering, and health fields, by citizenship, ethnicity, race, enrollment status, and sex: 2023
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A-10	Imputation for full-time graduate students in science, engineering, and health fields, by mechanism of support, sex, and source of support: 2023
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Table	Title
A-11	Imputation for postdoctoral appointees in science, engineering, and health fields, by citizenship, ethnicity, race, and sex: 2023
A-12	Imputation for postdoctoral appointees in science, engineering, and health fields, by mechanism of support, source of support, and sex: 2023
A-13	Imputation for postdoctoral appointees in science, engineering, and health fields, by mechanism of support, citizenship, and type of doctoral degree: 2023
A-14	Imputation for postdoctoral appointees in science, engineering, and health fields, by origin of doctoral degree: 2023
A-15	Imputation for doctorate-holding nonfaculty researchers in science, engineering, and health, by type of doctoral degree and sex: 2023

GSS and Classification of Instructional Programs codes

Table	Title
A-16	Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes
A-17	Mapping of 2023 GSS codes and fields

TABLE A-1

Changes in the organizational unit listing: 2021–23

(Number)

Activity	2021	2022	2023
Units at start of data collection	21,156	21,365	22,519
Units added	4,012	4,512	3,929
Units deleted	3,803	3,358	3,646
Units at end of data collection	21,365	22,519	22,802
Net difference	209	1,154	283

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-2

Changes in the institution status: 2022–23

(Number and detail)

Institution status
New institutions (1)
Pontifical Catholic U. Puerto Rico, Arecibo
Closed institutions (1)
Alderson-Broaddus U.
Became ineligible for the survey (3)
Marywood U.
Point Park U.
U. La Verne
Merged institutions (0)
Changed from a doctorate-granting to master's-granting institution (4) ^a
American International C.
Angelo State U.
Inter American U. Puerto Rico, San German
New Jersey City U.
Changed from a master's-granting to doctorate-granting institution (5) ^a
C. Charleston
California Institute of Integral Studies
East Stroudsburg U. Pennsylvania
Missouri State U.
National U.

^a Change in degree-granting status refers only to institutions that are eligible for the Survey of Graduate Students and Postdoctorates in Science and Engineering and with master's- or doctorate-granting programs in science, engineering, and health. Some institutions within these classifications may offer doctorate or master's degrees in other academic fields.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2023

(Number)

Year	Institutions	Schools ^a	Organizational units				Graduate enrollment		
			Total	Master's	Doctorate	Nondegree	Total	Full time	Part time
All institutions									
1972 ^b	252	321	4,568	764	3,804	0	207,859	159,392	48,467
1973 ^b	255	333	6,523	851	5,557	115	214,348	161,525	52,823
1974 ^b	276	367	7,468	1,387	5,951	130	259,968	190,562	69,406
1975	584	682	9,003	2,829	6,038	136	328,510	219,648	108,862
1976	594	693	9,110	2,895	6,074	141	333,716	223,412	110,304
1977	601	704	9,392	3,081	6,168	143	345,374	226,738	118,636
1978	599	708	9,509	3,126	6,239	144	339,912	223,030	116,882
1979	629	745	9,686	3,203	5,153	1,330	357,578	231,760	125,818
1980	626	742	9,798	3,255	5,011	1,532	367,078	238,416	128,662
1981	622	736	9,728	3,256	4,938	1,534	375,130	242,049	133,081
1982	609	724	9,584	3,241	4,822	1,521	382,291	244,757	137,534
1983	609	723	9,467	3,211	4,741	1,515	390,432	252,017	138,415
1984	412	530	8,791	2,503	4,725	1,563	394,670	253,922	140,748
1985	412	525	8,911	2,550	4,751	1,610	404,021	257,287	146,734
1986	412	527	8,985	2,558	4,782	1,645	415,520	266,168	149,352
1987	416	533	9,104	2,563	4,850	1,691	421,497	271,056	150,441
1988	606	723	10,015	3,310	4,950	1,755	424,523	275,127	149,396
1989	609	726	10,187	3,372	5,026	1,789	434,478	282,648	151,830
1990	610	727	10,358	3,448	5,059	1,851	452,113	292,782	159,331
1991	609	726	10,598	3,517	5,180	1,901	471,212	307,010	164,202
1992	608	725	10,872	3,602	5,298	1,972	493,522	322,555	170,967
1993	606	723	11,103	3,650	5,391	2,062	504,304	329,644	174,660
1994	605	722	11,365	3,759	5,500	2,106	504,399	332,088	172,311
1995	603	720	11,566	3,837	5,539	2,190	499,640	329,283	170,357
1996	603	720	11,579	3,886	5,507	2,186	494,079	328,536	165,543
1997	601	722	11,589	3,994	5,526	2,069	487,208	327,289	159,919
1998	601	721	11,685	4,020	5,590	2,075	485,627	327,389	158,238
1999	599	719	11,827	4,015	5,773	2,039	493,256	334,423	158,833
2000	596	716	11,894	4,085	5,791	2,018	493,311	341,283	152,028
2001	601	720	11,962	4,096	5,826	2,040	509,607	354,522	155,085
2002	596	715	12,126	4,165	5,931	2,030	540,404	378,991	161,413
2003	593	712	12,261	4,185	6,080	1,996	567,121	397,420	169,701
2004	591	710	12,268	4,180	6,142	1,946	574,463	402,573	171,890
2005	588	702	12,297	4,123	6,231	1,943	582,226	406,620	175,606

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2023

(Number)

Year	Institutions	Schools ^a	Organizational units				Graduate enrollment		
			Total	Master's	Doctorate	Nondegree	Total	Full time	Part time
2006	588	707	12,320	4,109	6,294	1,917	597,643	419,015	178,628
2007old ^c	582	700	12,325	4,148	6,418	1,759	607,823	430,860	176,963
2007new ^c	582	700	12,629	4,335	6,525	1,769	619,499	437,365	182,134
2008	579	708	13,166	4,399	6,710	2,057	631,489	449,613	181,876
2009	575	703	13,285	4,336	6,774	2,175	631,645	456,115	175,530
2010	574	692	13,711	4,416	6,863	2,432	632,652	461,185	171,467
2011	565	686	13,785	4,295	6,849	2,641	626,820	457,292	169,528
2012	565	684	13,952	4,320	6,911	2,721	627,243	459,498	167,745
2013	564	680	14,019	4,314	6,875	2,830	633,010	468,953	164,057
2014old ^d	557	671	14,369	4,375	6,940	3,054	650,738	484,880	165,858
2014new ^d	706	821	14,845	4,769	6,988	3,088	666,586	492,170	174,416
2015	711	824	15,202	4,901	7,104	3,197	685,397	506,262	179,135
2016 ^e	714	828	15,853	5,054	7,217	3,582	684,825	508,773	176,052
2017 ^f	703	814	18,745	5,580	7,004	6,161	649,112	480,788	168,324
2018	715	817	19,592	5,857	7,180	6,555	668,307	491,449	176,858
2019	714	809	20,249	5,985	7,203	7,061	690,117	502,442	187,675
2020 ^g	712	806	21,156	6,425	7,251	7,480	697,813	491,515	206,298
2021	699	787	21,365	6,559	7,377	7,429	760,156	543,823	216,333
2022	690	775	22,519	6,787	7,573	8,159	798,534	579,301	219,233
2023	687	770	22,802	6,813	7,491	8,498	818,095	598,588	219,507
Doctorate institutions									
1972	252	321	4,568	764	3,804	0	207,859	159,392	48,467
1973	255	333	6,523	851	5,557	115	214,348	161,525	52,823
1974	276	367	7,468	1,387	5,951	130	259,968	190,562	69,406
1975	345	443	8,031	1,857	6,038	136	301,902	209,328	92,574
1976	355	454	8,131	1,916	6,074	141	305,824	213,033	92,791
1977	357	460	8,361	2,050	6,168	143	313,938	215,377	98,561
1978	345	454	8,381	1,998	6,239	144	308,107	211,508	96,599
1979	371	487	8,612	2,130	5,153	1,329	323,677	219,634	104,043
1980	370	486	8,714	2,174	5,011	1,529	333,164	225,877	107,287
1981	370	484	8,645	2,174	4,938	1,533	339,946	229,708	110,238
1982	369	484	8,504	2,162	4,822	1,520	346,668	232,980	113,688
1983	371	485	8,386	2,133	4,741	1,512	354,060	239,220	114,840
1984	346	464	8,320	2,033	4,725	1,562	353,673	239,400	114,273

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2023

(Number)

Year	Institutions	Schools ^a	Organizational units				Graduate enrollment		
			Total	Master's	Doctorate	Nondegree	Total	Full time	Part time
1985	346	459	8,434	2,074	4,751	1,609	362,581	242,748	119,833
1986	346	461	8,509	2,083	4,782	1,644	373,545	251,562	121,983
1987	350	467	8,626	2,087	4,850	1,689	378,785	255,936	122,849
1988	377	494	8,949	2,250	4,950	1,749	386,300	262,351	123,949
1989	380	497	9,084	2,276	5,026	1,782	394,510	269,679	124,831
1990	379	496	9,234	2,332	5,059	1,843	409,419	278,637	130,782
1991	379	496	9,435	2,362	5,180	1,893	425,914	291,508	134,406
1992	379	496	9,678	2,417	5,298	1,963	445,704	305,979	139,725
1993	379	496	9,875	2,434	5,391	2,050	454,745	312,519	142,226
1994	378	495	10,093	2,499	5,500	2,094	455,332	313,976	141,356
1995	377	494	10,269	2,552	5,539	2,178	449,555	310,538	139,017
1996	378	495	10,289	2,608	5,507	2,174	444,319	309,418	134,901
1997	377	498	10,271	2,688	5,526	2,057	438,135	307,697	130,438
1998	377	497	10,366	2,713	5,590	2,063	435,826	307,040	128,786
1999	378	498	10,482	2,683	5,773	2,026	443,104	313,866	129,238
2000	377	497	10,526	2,726	5,791	2,009	443,542	319,923	123,619
2001	381	500	10,577	2,728	5,826	2,023	459,438	332,732	126,706
2002	376	495	10,726	2,778	5,931	2,017	487,645	355,611	132,034
2003	376	495	10,849	2,790	6,080	1,979	510,335	372,366	137,969
2004	376	495	10,858	2,781	6,142	1,935	518,641	377,984	140,657
2005	375	489	10,907	2,745	6,231	1,931	527,048	381,198	145,850
2006	376	495	10,946	2,745	6,294	1,907	542,073	393,138	148,935
2007old ^c	375	493	10,976	2,830	6,418	1,728	551,832	403,722	148,110
2007new ^c	375	493	11,210	2,949	6,525	1,736	561,352	409,421	151,931
2008	376	505	11,773	3,042	6,710	2,021	574,241	422,287	151,954
2009	366	493	11,865	2,956	6,774	2,135	573,883	428,856	145,027
2010	364	481	12,276	3,023	6,863	2,390	575,785	433,252	142,533
2011	368	488	12,419	2,964	6,849	2,606	570,534	430,623	139,911
2012	367	485	12,567	2,977	6,911	2,679	571,578	433,177	138,401
2013	364	480	12,607	2,940	6,875	2,792	574,004	439,950	134,054
2014old ^d	366	480	12,985	3,028	6,940	3,017	588,600	451,884	136,716
2014new ^d	406	521	13,140	3,115	6,988	3,037	588,952	452,801	136,151
2015	412	525	13,506	3,251	7,104	3,151	604,944	464,695	140,249
2016 ^e	415	529	14,188	3,451	7,217	3,520	609,420	468,678	140,742

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2023

(Number)

Year	Institutions	Schools ^a	Organizational units				Graduate enrollment		
			Total	Master's	Doctorate	Nondegree	Total	Full time	Part time
2017 ^f	399	509	16,971	3,934	7,004	6,033	577,139	442,001	135,138
2018	421	522	17,782	4,186	7,180	6,416	602,332	457,543	144,789
2019	417	512	18,460	4,322	7,203	6,935	627,136	469,732	157,404
2020 ^g	411	505	19,206	4,611	7,251	7,344	628,220	456,426	171,794
2021	418	506	19,506	4,826	7,377	7,303	689,916	507,180	182,736
2022	417	502	20,698	5,092	7,573	8,033	724,378	538,340	186,038
2023	418	501	20,994	5,138	7,491	8,365	746,241	557,802	188,439
Master's institutions									
1975	239	239	972	972	na	0	26,608	10,320	16,288
1976 ^h	239	239	979	979	na	0	27,892	10,379	17,513
1977	244	244	1,031	1,031	na	0	31,436	11,361	20,075
1978 ⁱ	254	254	1,128	1,128	na	0	31,805	11,522	20,283
1979	258	258	1,074	1,073	na	1	33,901	12,126	21,775
1980	256	256	1,084	1,081	na	3	33,914	12,539	21,375
1981	252	252	1,083	1,082	na	1	35,184	12,341	22,843
1982	240	240	1,080	1,079	na	1	35,623	11,777	23,846
1983	238	238	1,081	1,078	na	3	36,372	12,797	23,575
1984	66	66	471	470	na	1	40,997	14,522	26,475
1985	66	66	477	476	na	1	41,440	14,539	26,901
1986	66	66	476	475	na	1	41,975	14,606	27,369
1987	66	66	478	476	na	2	42,712	15,120	27,592
1988	229	229	1,066	1,060	na	6	38,223	12,776	25,447
1989	229	229	1,103	1,096	na	7	39,968	12,969	26,999
1990	231	231	1,124	1,116	na	8	42,694	14,145	28,549
1991	230	230	1,163	1,155	na	8	45,298	15,502	29,796
1992	229	229	1,194	1,185	na	9	47,818	16,576	31,242
1993	227	227	1,228	1,216	na	12	49,559	17,125	32,434
1994	227	227	1,272	1,260	na	12	49,067	18,112	30,955
1995	226	226	1,297	1,285	na	12	50,085	18,745	31,340
1996	225	225	1,290	1,278	na	12	49,760	19,118	30,642
1997	224	224	1,318	1,306	na	12	49,073	19,592	29,481
1998	224	224	1,319	1,307	na	12	49,801	20,349	29,452
1999	221	221	1,345	1,332	na	13	50,152	20,557	29,595
2000	219	219	1,368	1,359	na	9	49,769	21,360	28,409
2001	220	220	1,385	1,368	na	17	50,169	21,790	28,379

TABLE A-3

Surveyed institutions, schools, organizational units, and graduate enrollment, by type of institution: 1972–2023

(Number)

Year	Institutions	Schools ^a	Organizational units				Graduate enrollment		
			Total	Master's	Doctorate	Nondegree	Total	Full time	Part time
2002	220	220	1,400	1,387	na	13	52,759	23,380	29,379
2003	217	217	1,412	1,395	na	17	56,786	25,054	31,732
2004	215	215	1,410	1,399	na	11	55,822	24,589	31,233
2005	213	213	1,390	1,378	na	12	55,178	25,422	29,756
2006	212	212	1,374	1,364	na	10	55,570	25,877	29,693
2007old ^c	207	207	1,349	1,318	na	31	55,991	27,138	28,853
2007new ^c	207	207	1,419	1,386	na	33	58,147	27,944	30,203
2008	203	203	1,393	1,357	na	36	57,248	27,326	29,922
2009	209	210	1,420	1,380	na	40	57,762	27,259	30,503
2010	210	211	1,435	1,393	na	42	56,867	27,933	28,934
2011	197	198	1,366	1,331	na	35	56,286	26,669	29,617
2012	198	199	1,385	1,343	na	42	55,665	26,321	29,344
2013	200	200	1,412	1,374	na	38	59,006	29,003	30,003
2014old ^d	191	191	1,384	1,347	na	37	62,138	32,996	29,142
2014new ^d	300	300	1,705	1,654	na	51	77,634	39,369	38,265
2015	299	299	1,696	1,650	na	46	80,453	41,567	38,886
2016 ^e	299	299	1,665	1,603	na	62	75,405	40,095	35,310
2017 ^f	304	305	1,774	1,646	na	128	71,973	38,787	33,186
2018	294	295	1,810	1,671	na	139	65,975	33,906	32,069
2019	297	297	1,789	1,663	na	126	62,981	32,710	30,271
2020 ^g	301	301	1,950	1,814	na	136	69,593	35,089	34,504
2021	281	281	1,859	1,733	na	126	70,240	36,643	33,597
2022	273	273	1,821	1,695	na	126	74,156	40,961	33,195
2023	269	269	1,808	1,675	na	133	71,854	40,786	31,068

na = not applicable.

^a Schools are administrative and degree-granting entities within academic institutions. Schools surveyed may exceed institutions surveyed because schools at some institutions report information to the survey separately. Examples of schools eligible for the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) include graduate schools, schools of architecture, schools of medicine, schools of nursing, schools of pharmacology, schools of public health, and schools of veterinary medicine.

^b Data collected only from the doctorate-granting institutions.

^c In 2007, GSS-eligible fields were reclassified, newly eligible fields were added, and the survey was redesigned to improve coverage and coding of GSS-eligible units. "2007new" presents data as collected in 2007; "2007old" reflects data as they would have been collected under 2006 methodology. See appendix A in <https://www.nsf.gov/statistics/nsf10307/>.

^d In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible.

^e The 2016 survey included a pilot data collection to assess the feasibility of several data collection changes, including the use of Classification of Instructional Programs (CIP) codes for reporting data and file uploads for transmitting data. The number of units added and deleted by pilot coordinators was much greater than is typical. These increases are largely due to how data are organized in institutional information systems and the increased granularity of CIP codes relative to GSS codes rather than a reflection of increased organizational complexity.

^f The 2017 GSS survey was redesigned to fully implement the changes in the 2016 pilot to all coordinators (collection via CIP code and uploads; separate reporting of master's and doctoral data) and to align with GSS taxonomy with the National Center for Science and Engineering Statistics Taxonomy of Disciplines (TOD), which made several fields ineligible. Thus, there was an increase in the number of units reported and a decrease in the number of graduate students reported to the GSS. Data from 2017 are not directly comparable to 2016 and earlier.

^g In 2020, new Classification of Instructional Programs (CIP) codes were added to align with the CIP code 2020 and the 2020 revision to TOD. Additionally, several GSS codes were split to show additional detail. Code splits may lead to an increase in units.

^h The 1976 survey also collected 1975 data from master's-granting institutions.

ⁱ Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

Note(s):

Data from 1972 to 1974 are not directly comparable with data from 1975 forward due to changes both in science and engineering fields and in types of institutions covered in the survey. In 2007, newly eligible science fields were added. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-4

Science, engineering, and health organizational units with graduate student enrollment, by detailed field: 2021–23

(Number)

Field	2021			2022			2023		
	All units with students	Units with master's students	Units with doctoral students	All units with students	Units with master's students	Units with doctoral students	All units with students	Units with master's students	Units with doctoral students
All surveyed fields	13,928	10,864	7,346	14,354	11,148	7,545	14,304	11,137	7,473
Science	9,898	7,467	5,256	10,192	7,666	5,393	10,146	7,655	5,333
Agricultural and veterinary sciences	331	297	211	352	308	223	345	299	220
Agricultural sciences	298	271	187	318	283	201	307	273	195
Veterinary biomedical and clinical sciences	33	26	24	34	25	22	38	26	25
Biological and biomedical sciences	2,694	1,604	1,860	2,776	1,696	1,890	2,743	1,682	1,863
Biochemistry	183	85	153	187	90	158	177	81	151
Biology	383	338	157	389	341	158	399	352	161
Biomedical sciences	175	112	106	185	130	107	189	124	110
Biophysics	42	6	41	38	6	38	40	4	40
Biostatistics and bioinformatics	196	146	123	204	153	126	204	146	128
Biotechnology	85	78	9	88	82	8	91	84	10
Botany and plant biology	61	51	55	65	55	57	61	55	54
Cell, cellular biology, and anatomical sciences	199	81	161	195	92	157	182	83	149
Ecology and population biology	109	73	80	113	74	80	107	72	79
Epidemiology	88	61	65	101	69	70	106	78	70
Genetics	93	46	72	99	50	76	100	48	75
Microbiological sciences and immunology	180	84	149	184	88	150	179	86	147
Molecular biology	54	21	40	53	22	39	48	19	35
Neurobiology and neuroscience	175	41	159	187	47	167	179	48	164
Nutrition science	112	97	55	116	100	58	121	103	61
Pathology and experimental pathology	45	16	39	40	13	34	45	14	36
Pharmacology and toxicology	141	57	122	147	61	129	141	60	124
Physiology	202	107	146	206	111	148	209	121	147
Zoology and animal biology	70	59	60	79	65	66	68	58	58
Biological and biomedical sciences nec	101	45	68	100	47	64	97	46	64
Computer and information sciences	1,023	945	288	1,075	982	308	1,115	1,017	319
Artificial intelligence, informatics, and computer and information science topics	84	77	20	92	81	21	98	88	25
Computer and information sciences	215	185	86	213	178	91	221	182	94
Computer and information systems security	142	140	7	160	157	8	178	173	11
Computer science	273	254	125	291	266	137	296	272	137
Information science and studies	127	117	29	131	120	31	132	121	32
Information technology	90	86	11	98	94	11	100	95	12
Computer and information sciences nec	92	86	10	90	86	9	90	86	8
Geosciences, atmospheric, and ocean sciences	391	331	267	396	335	266	382	322	265

TABLE A-4

Science, engineering, and health organizational units with graduate student enrollment, by detailed field: 2021–23

(Number)

Field	2021			2022			2023		
	All units with students	Units with master's students	Units with doctoral students	All units with students	Units with master's students	Units with doctoral students	All units with students	Units with master's students	Units with doctoral students
Atmospheric sciences and meteorology	51	41	42	59	48	46	49	39	43
Geological and earth sciences	258	223	166	260	224	163	254	219	164
Ocean and marine sciences	82	67	59	77	63	57	79	64	58
Mathematics and statistics	724	628	335	748	644	345	746	648	338
Applied mathematics	212	176	80	218	183	80	215	181	75
Mathematics	313	270	165	323	275	171	318	274	167
Statistics	199	182	90	207	186	94	213	193	96
Multidisciplinary and interdisciplinary sciences	396	311	136	439	354	145	493	405	159
Biological and physical sciences	34	26	16	38	29	17	43	34	17
Computational science	50	41	17	56	48	15	57	50	14
Data science and data analytics	50	49	2	70	69	5	102	99	10
International and global studies	34	29	9	33	30	8	33	31	6
Multidisciplinary and interdisciplinary sciences nec	228	166	92	242	178	100	258	191	112
Natural resources and conservation	362	316	154	381	320	168	377	329	160
Environmental science and studies	207	179	70	218	177	81	213	181	76
Forestry, natural resources, and conservation	155	137	84	163	143	87	164	148	84
Physical sciences	779	570	544	806	577	565	786	559	556
Astronomy and astrophysics	58	15	51	61	15	54	60	17	53
Chemistry	355	287	228	356	292	229	350	275	229
Materials sciences	54	37	41	63	36	48	62	38	48
Physics	282	209	211	298	216	219	286	209	212
Physical sciences nec	30	22	13	28	18	15	28	20	14
Psychology	1,141	818	509	1,158	828	518	1,145	809	509
Applied psychology	399	337	143	416	352	148	412	345	144
Clinical psychology	122	61	67	123	63	66	119	57	67
Counseling psychology	127	94	48	121	90	47	117	86	44
Human development	72	61	29	70	60	27	68	55	28
Psychology, general	267	199	110	264	197	109	245	187	94
Research and experimental psychology	154	66	112	164	66	121	184	79	132
Social sciences	2,057	1,647	952	2,061	1,622	965	2,014	1,585	944
Agricultural and natural resource economics	40	36	17	37	32	16	32	28	11
Anthropology	175	127	108	178	128	111	171	122	108
Area, ethnic, cultural, gender, and group studies	309	246	116	292	227	116	302	236	123
Criminal justice and safety studies	115	110	22	119	114	23	117	115	21
Criminology	43	41	13	46	43	14	48	44	16

TABLE A-4

Science, engineering, and health organizational units with graduate student enrollment, by detailed field: 2021–23

(Number)

Field	2021			2022			2023		
	All units with students	Units with master's students	Units with doctoral students	All units with students	Units with master's students	Units with doctoral students	All units with students	Units with master's students	Units with doctoral students
Economics (except agricultural and natural resource)	276	219	157	295	229	164	284	220	165
Geography and cartography	173	166	69	164	157	65	146	141	54
International relations and national security studies	104	98	16	100	96	12	103	100	12
Linguistics	106	77	63	107	77	64	105	81	63
Political science and government	210	166	125	213	158	131	206	153	126
Public policy analysis	141	106	58	148	112	60	137	104	56
Sociology	228	154	129	224	148	127	217	136	129
Urban studies and affairs	38	29	15	39	30	15	40	33	13
Social sciences, other	99	72	44	99	71	47	106	72	47
Engineering	2,479	2,204	1,437	2,545	2,250	1,455	2,562	2,254	1,460
Aerospace, aeronautical, and astronautical engineering	72	70	51	73	71	52	75	74	52
Biological, biomedical, and biosystems engineering	228	191	163	234	193	167	244	206	170
Chemical, petroleum, and chemical-related engineering	193	174	144	202	182	147	195	173	149
Chemical engineering	169	152	128	174	157	130	173	153	134
Petroleum engineering	24	22	16	28	25	17	22	20	15
Civil, environmental, transportation and related engineering fields	367	336	205	388	357	209	385	347	209
Civil engineering	239	223	146	249	233	148	250	229	148
Architectural, environmental, construction and surveying engineering	128	113	59	139	124	61	135	118	61
Electrical, electronics, communications and computer engineering	469	433	242	481	441	247	482	442	244
Electrical, electronics, and communications engineering	290	265	174	299	272	178	302	274	177
Computer engineering	179	168	68	182	169	69	180	168	67
Industrial, manufacturing, systems engineering and operations research	248	225	115	241	224	107	244	226	106
Industrial and manufacturing engineering	129	125	60	125	121	61	131	127	63
Systems engineering and operations research	119	100	55	116	103	46	113	99	43
Mechanical engineering	298	279	174	301	279	178	310	287	179
Metallurgical, mining, materials and related engineering fields	154	133	114	147	127	106	151	125	109
Other engineering	450	363	229	478	376	242	476	374	242
Agricultural engineering	31	29	26	34	31	27	36	31	29
Engineering mechanics, physics, and science	68	47	45	68	46	47	68	45	46
Nuclear engineering	32	30	28	29	27	26	28	27	25
Engineering, other	319	257	130	347	272	142	344	271	142
Health	1,551	1,193	653	1,617	1,232	697	1,596	1,228	680
Clinical medicine	585	500	211	600	513	218	594	506	215
Medical clinical sciences and clinical and medical laboratory sciences	80	61	29	75	56	30	83	62	33
Public health	505	439	182	525	457	188	511	444	182

TABLE A-4

Science, engineering, and health organizational units with graduate student enrollment, by detailed field: 2021–23

(Number)

Field	2021			2022			2023		
	All units with students	Units with master's students	Units with doctoral students	All units with students	Units with master's students	Units with doctoral students	All units with students	Units with master's students	Units with doctoral students
Other health	966	693	442	1,017	719	479	1,002	722	465
Communication disorders sciences	250	234	67	259	240	72	270	250	74
Dental sciences	90	78	21	97	84	23	89	79	20
Kinesiology and exercise science	170	158	46	176	162	47	164	149	43
Nursing science	140	24	125	149	24	136	146	26	133
Pharmaceutical sciences	127	83	94	135	88	101	127	89	93
Other health nec	189	116	89	201	121	100	206	129	102

nec = not elsewhere classified.

Note(s):This table only contains fields where graduate students may be reported. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the ["Technical Notes."](#)**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-5a

Science, engineering, and health organizational units with doctorate-holding nonfaculty researchers, by detailed field: 2021–23

(Number)

Field	2021	2022	2023
All surveyed fields	5,690	6,204	6,418
Science	3,326	3,638	3,713
Agricultural and veterinary sciences	241	274	292
Agricultural sciences	169	195	204
Veterinary biomedical and clinical sciences	72	79	88
Biological and biomedical sciences	1,284	1,329	1,340
Biochemistry	118	122	120
Biology	147	151	144
Biomedical sciences	51	56	55
Biophysics	9	13	10
Biostatistics and bioinformatics	59	71	84
Biotechnology	14	18	18
Botany and plant biology	29	35	33
Cell, cellular biology, and anatomical sciences	79	82	93
Ecology and population biology	53	48	47
Epidemiology	26	26	34
Genetics	76	80	76
Microbiological sciences and immunology	107	112	118
Molecular biology	32	32	27
Neurobiology and neuroscience	96	98	97
Nutrition science	41	24	24
Pathology and experimental pathology	39	46	48
Pharmacology and toxicology	69	64	68
Physiology	106	117	109
Zoology and animal biology	31	34	40
Biological and biomedical sciences nec	102	100	95
Computer and information sciences	137	167	198
Artificial intelligence, informatics, and computer and information science topics	15	17	25
Computer and information sciences	29	38	49
Computer and information systems security	4	6	5
Computer science	54	61	65
Information science and studies	9	14	17
Information technology	4	2	6
Computer and information sciences nec	22	29	31
Geosciences, atmospheric, and ocean sciences	235	241	256
Atmospheric sciences and meteorology	42	40	41

TABLE A-5a

Science, engineering, and health organizational units with doctorate-holding nonfaculty researchers, by detailed field: 2021–23

(Number)

Field	2021	2022	2023
Geological and earth sciences	124	122	136
Ocean and marine sciences	50	56	57
Geosciences, atmospheric, and ocean sciences nec	19	23	22
Mathematics and statistics	72	81	89
Applied mathematics	16	19	20
Mathematics	31	37	45
Statistics	25	25	24
Multidisciplinary and interdisciplinary sciences	178	218	197
Biological and physical sciences	12	14	12
Computational science	7	6	10
Data science and data analytics	8	14	19
International and global studies	7	8	9
Multidisciplinary and interdisciplinary sciences nec	144	176	147
Natural resources and conservation	135	152	140
Environmental science and studies	48	57	53
Forestry, natural resources, and conservation	87	95	87
Physical sciences	410	449	451
Astronomy and astrophysics	53	58	63
Chemistry	161	174	163
Materials sciences	20	25	29
Physics	156	167	171
Physical sciences nec	20	25	25
Psychology	172	210	217
Applied psychology	25	29	32
Clinical psychology	7	6	9
Counseling psychology	6	6	4
Human development	29	53	51
Psychology, general	75	88	92
Research and experimental psychology	30	28	29
Social sciences	462	517	533
Agricultural and natural resource economics	15	15	21
Anthropology	39	40	35
Area, ethnic, cultural, gender, and group studies	47	52	57
Criminal justice and safety studies	7	10	9
Criminology	4	5	4
Economics (except agricultural and natural resource)	48	47	42

TABLE A-5a

Science, engineering, and health organizational units with doctorate-holding nonfaculty researchers, by detailed field: 2021–23

(Number)

Field	2021	2022	2023
Geography and cartography	30	22	27
International relations and national security studies	19	18	26
Linguistics	13	16	21
Political science and government	24	31	35
Public policy analysis	72	89	86
Sociology	49	56	59
Urban studies and affairs	10	17	9
Social sciences, other	85	99	102
Engineering	829	928	953
Aerospace, aeronautical, and astronautical engineering	28	36	35
Biological, biomedical, and biosystems engineering	102	124	126
Chemical, petroleum, and chemical-related engineering	81	97	97
Chemical engineering	70	87	88
Petroleum engineering	11	10	9
Civil, environmental, transportation and related engineering fields	123	134	152
Civil engineering	108	119	131
Architectural, environmental, construction and surveying engineering	15	15	21
Electrical, electronics, communications and computer engineering	137	140	152
Electrical, electronics, and communications engineering	125	129	138
Computer engineering	12	11	14
Industrial, manufacturing, systems engineering and operations research	38	49	46
Industrial and manufacturing engineering	23	31	29
Systems engineering and operations research	15	18	17
Mechanical engineering	102	110	111
Metallurgical, mining, materials and related engineering fields	59	62	58
Other engineering	159	176	176
Agricultural engineering	16	16	15
Engineering mechanics, physics, and science	20	27	25
Nuclear engineering	8	11	10
Engineering, other	115	122	126
Health	1,535	1,638	1,752
Clinical medicine	1,268	1,332	1,392
Anesthesiology	30	33	34
Cardiology	35	35	35
Endocrinology	27	28	29
Gastroenterology	27	25	23

TABLE A-5a

Science, engineering, and health organizational units with doctorate-holding nonfaculty researchers, by detailed field: 2021–23

(Number)

Field	2021	2022	2023
Hematology	25	24	24
Medical clinical sciences and clinical and medical laboratory sciences	45	44	70
Neurology	82	87	87
Obstetrics and gynecology	35	39	40
Oncology and cancer research	56	65	85
Ophthalmology	40	41	45
Otorhinolaryngology	29	29	28
Pediatrics	89	104	103
Psychiatry	49	54	56
Public health	141	164	182
Pulmonary disease	26	28	28
Radiological sciences	63	86	81
Surgery	133	141	141
Clinical medicine nec	336	305	301
Other health	267	306	360
Communication disorders sciences	24	30	36
Dental sciences	31	42	45
Kinesiology and exercise science	11	17	15
Nursing science	36	52	61
Pharmaceutical sciences	75	78	88
Other health nec	90	87	115

nec = not elsewhere classified.

Note(s):

For doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Graduate Students and Postdoctorates in Science and Engineering (GSS). This table only contains fields where graduate students may be reported. For more information on the mapping of GSS fields and codes, see [technical table A-17](#).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-5b

Science, engineering, and health organizational units with postdoctoral appointees, by detailed field: 2021–23

(Number)

Field	2021	2022	2023
All surveyed fields	7,624	7,962	8,176
Science	4,457	4,677	4,800
Agricultural and veterinary sciences	276	337	329
Agricultural sciences	198	220	228
Veterinary biomedical and clinical sciences	78	117	101
Biological and biomedical sciences	1,808	1,800	1,798
Biochemistry	139	138	143
Biology	188	204	214
Biomedical sciences	116	70	80
Biophysics	19	12	16
Biostatistics and bioinformatics	77	87	89
Biotechnology	18	23	20
Botany and plant biology	44	48	47
Cell, cellular biology, and anatomical sciences	118	125	116
Ecology and population biology	57	61	64
Epidemiology	43	51	54
Genetics	105	97	103
Microbiological sciences and immunology	161	173	160
Molecular biology	48	40	41
Neurobiology and neuroscience	137	140	138
Nutrition science	32	36	44
Pathology and experimental pathology	69	69	70
Pharmacology and toxicology	96	97	93
Physiology	172	174	155
Zoology and animal biology	49	43	48
Biological and biomedical sciences nec	120	112	103
Computer and information sciences	196	192	201
Artificial intelligence, informatics, and computer and information science topics	17	19	27
Computer and information sciences	49	47	55
Computer and information systems security	4	5	4
Computer science	88	83	78
Information science and studies	13	18	16
Information technology	3	3	2
Computer and information sciences nec	22	17	19
Geosciences, atmospheric, and ocean sciences	256	270	262
Atmospheric sciences and meteorology	42	47	38

TABLE A-5b

Science, engineering, and health organizational units with postdoctoral appointees, by detailed field: 2021–23

(Number)

Field	2021	2022	2023
Geological and earth sciences	134	143	148
Ocean and marine sciences	53	56	56
Geosciences, atmospheric, and ocean sciences nec	27	24	20
Mathematics and statistics	186	200	211
Applied mathematics	34	36	39
Mathematics	102	114	119
Statistics	50	50	53
Multidisciplinary and interdisciplinary sciences	174	189	211
Biological and physical sciences	20	17	11
Computational science	9	11	10
Data science and data analytics	13	14	30
International and global studies	5	5	11
Multidisciplinary and interdisciplinary sciences nec	127	142	149
Natural resources and conservation	144	162	177
Environmental science and studies	49	59	71
Forestry, natural resources, and conservation	95	103	106
Physical sciences	557	593	578
Astronomy and astrophysics	67	70	73
Chemistry	220	221	227
Materials sciences	29	24	25
Physics	225	258	234
Physical sciences nec	16	20	19
Psychology	246	266	263
Applied psychology	44	42	44
Clinical psychology	20	16	17
Counseling psychology	6	8	7
Human development	35	39	43
Psychology, general	102	118	111
Research and experimental psychology	39	43	41
Social sciences	614	668	770
Agricultural and natural resource economics	22	23	31
Anthropology	57	65	81
Area, ethnic, cultural, gender, and group studies	106	120	156
Criminal justice and safety studies	9	8	12
Criminology	2	5	4
Economics (except agricultural and natural resource)	63	58	63

TABLE A-5b

Science, engineering, and health organizational units with postdoctoral appointees, by detailed field: 2021–23

(Number)

Field	2021	2022	2023
Geography and cartography	43	44	48
International relations and national security studies	18	18	19
Linguistics	29	30	26
Political science and government	49	56	64
Public policy analysis	59	64	77
Sociology	66	77	84
Urban studies and affairs	6	9	4
Social sciences, other	85	91	101
Engineering	1,090	1,152	1,200
Aerospace, aeronautical, and astronautical engineering	35	39	45
Biological, biomedical, and biosystems engineering	146	145	156
Chemical, petroleum, and chemical-related engineering	133	144	144
Chemical engineering	120	135	131
Petroleum engineering	13	9	13
Civil, environmental, transportation and related engineering fields	174	190	194
Civil engineering	154	169	168
Architectural, environmental, construction and surveying engineering	20	21	26
Electrical, electronics, communications and computer engineering	159	165	173
Electrical, electronics, and communications engineering	144	146	154
Computer engineering	15	19	19
Industrial, manufacturing, systems engineering and operations research	44	44	59
Industrial and manufacturing engineering	31	31	45
Systems engineering and operations research	13	13	14
Mechanical engineering	158	163	167
Metallurgical, mining, materials and related engineering fields	78	82	84
Other engineering	163	180	178
Agricultural engineering	19	25	22
Engineering mechanics, physics, and science	24	25	26
Nuclear engineering	12	13	11
Engineering, other	108	117	119
Health	2,077	2,133	2,176
Clinical medicine	1,713	1,730	1,746
Anesthesiology	47	46	50
Cardiology	54	60	55
Endocrinology	41	43	44
Gastroenterology	37	43	40

TABLE A-5b

Science, engineering, and health organizational units with postdoctoral appointees, by detailed field: 2021–23

(Number)

Field	2021	2022	2023
Hematology	27	31	28
Medical clinical sciences and clinical and medical laboratory sciences	48	31	54
Neurology	126	118	128
Obstetrics and gynecology	48	43	49
Oncology and cancer research	107	105	119
Ophthalmology	63	61	67
Otorhinolaryngology	34	35	34
Pediatrics	127	135	121
Psychiatry	88	86	83
Public health	180	185	184
Pulmonary disease	37	35	38
Radiological sciences	102	113	109
Surgery	182	189	180
Clinical medicine nec	365	371	363
Other health	364	403	430
Communication disorders sciences	31	32	32
Dental sciences	62	66	66
Kinesiology and exercise science	25	25	30
Nursing science	41	55	60
Pharmaceutical sciences	100	109	107
Other health nec	105	116	135

nec = not elsewhere classified.

Note(s):

For doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). This table only contains fields where graduate students may be reported. For more information on the mapping of GSS fields and codes, see [technical table A-17](#). Clinical medicine includes postdoctoral appointees in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-6

Response rates for science, engineering, and health organizational units: 1975–2023

(Number and percent)

Year	Total	Total response		Complete response		Partial response		Nonresponse	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1975	9,162	8,998	98.2	8,998	98.2	NA	NA	164	1.8
1976 ^a	9,275	9,148	98.6	9,148	98.6	NA	NA	127	1.4
1977	9,513	9,432	99.1	9,432	99.1	NA	NA	81	0.9
1978 ^b	8,242	8,077	98.0	8,077	98.0	NA	NA	165	2.0
1979	9,796	9,446	96.4	9,446	96.4	NA	NA	350	3.6
1980	9,930	9,593	96.6	9,593	96.6	NA	NA	337	3.4
1981	9,917	9,207	92.8	8,594	86.7	613	6.2	710	7.2
1982	9,776	8,848	90.5	8,104	82.9	744	7.6	928	9.5
1983	9,663	8,886	92.0	8,070	83.5	816	8.4	777	8.0
1984	8,748	8,133	93.0	7,490	85.6	643	7.4	615	7.0
1985	9,025	8,490	94.1	7,818	86.6	672	7.4	535	5.9
1986	9,097	8,596	94.5	7,817	85.9	779	8.6	501	5.5
1987	9,254	8,745	94.5	8,030	86.8	715	7.7	509	5.5
1988	10,295	9,782	95.0	8,812	85.6	970	9.4	513	5.0
1989	10,318	9,799	95.0	8,908	86.3	891	8.6	519	5.0
1990	10,483	9,937	94.8	8,884	84.7	1,053	10.0	546	5.2
1991	10,705	10,238	95.6	9,052	84.6	1,186	11.1	467	4.4
1992	10,936	10,604	97.0	9,066	82.9	1,538	14.1	332	3.0
1993	11,146	10,711	96.1	9,156	82.1	1,555	14.0	435	3.9
1994	11,411	10,972	96.2	8,863	77.7	2,109	18.5	439	3.8
1995	11,598	11,244	96.9	9,514	82.0	1,730	14.9	354	3.1
1996	11,592	11,373	98.1	9,851	85.0	1,522	13.1	219	1.9
1997	11,597	11,385	98.2	9,720	83.8	1,665	14.4	212	1.8
1998	11,718	11,528	98.4	9,822	83.8	1,706	14.6	190	1.6
1999	11,833	11,685	98.7	9,396	79.4	2,289	19.3	148	1.3
2000	11,899	11,783	99.0	9,818	82.5	1,965	16.5	116	1.0
2001	11,967	11,852	99.0	10,121	84.6	1,731	14.5	115	1.0
2002	12,126	12,001	99.0	10,434	86.0	1,567	12.9	125	1.0
2003	12,261	12,052	98.3	10,343	84.4	1,709	13.9	209	1.7
2004old ^c	12,240	12,035	98.3	10,426	85.2	1,609	13.1	205	1.7
2004new ^d	12,240	11,998	98.0	10,524	86.0	1,474	12.0	242	2.0
2005 ^d	12,396	12,053	97.2	10,783	87.0	1,270	10.2	343	2.8
2006 ^d	12,320	11,991	97.3	10,814	87.8	1,177	9.6	329	2.7
2007 ^e	12,629	12,310	97.5	11,020	87.3	1,290	10.2	319	2.5

TABLE A-6

Response rates for science, engineering, and health organizational units: 1975–2023

(Number and percent)

Year	Total	Total response		Complete response		Partial response		Nonresponse	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
2008	13,166	13,010	98.8	11,574	87.9	1,436	10.9	156	1.2
2009	13,285	13,187	99.3	11,709	88.1	1,478	11.1	98	0.7
2010 ^f	13,711	13,583	99.1	11,601	84.6	1,982	14.5	128	0.9
2011 ^f	13,785	13,627	98.9	11,622	84.3	2,005	14.5	158	1.1
2012	13,952	13,898	99.6	11,914	85.4	1,984	14.2	54	0.4
2013	14,019	13,979	99.7	12,056	86.0	1,923	13.7	40	0.3
2014old ^g	14,369	14,336	99.8	12,413	86.4	1,923	13.4	33	0.2
2014new ^g	14,845	14,798	99.7	12,832	86.4	1,966	13.2	47	0.3
2015	15,202	15,119	99.5	12,714	83.6	2,405	15.8	83	0.5
2016	15,853	15,774	99.5	13,617	85.9	2,157	13.6	79	0.5
2017 ^h	18,745	18,293	97.6	15,946	85.1	2,347	12.5	452	2.4
2018	19,592	19,384	98.9	16,410	83.8	2,974	15.2	208	1.1
2019	20,249	19,718	97.4	17,035	84.1	2,683	13.3	531	2.6
2020	21,156	20,486	96.8	17,764	84.0	2,722	12.9	670	3.2
2021	21,365	20,990	98.2	18,186	85.1	2,804	13.1	375	1.8
2022	22,519	22,227	98.7	19,112	84.9	3,115	13.8	292	1.3
2023	22,802	22,308	97.8	18,891	82.8	3,417	15.0	494	2.2

NA = not available; organizational units providing partial responses are included in complete response column prior to 1981 and reported separately beginning in 1981.

^a The 1976 survey also collected 1975 data from master's-granting institutions.

^b Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

^c Calculated using response-rate formula used through 2003. See appendix A in <https://www.nsf.gov/statistics/nsf06307/>.

^d Calculated using response-rate formula used from 2004 to 2006. Schools closed in 2005 because of Hurricane Katrina were counted as nonrespondents.

^e Calculated using response-rate formula implemented in 2007. See appendix A in <https://www.nsf.gov/statistics/nsf10307/>.

^f The 2010 and 2011 postdoctoral appointees (postdocs) and doctorate-holding nonfaculty researcher data were reimputed following the 2012 data collection; these numbers have been updated to reflect the reimputed data and supersede those contained in previous reports.

^g In 2014, the survey frame was updated following a comprehensive frame evaluation study. The study identified potentially eligible but not previously surveyed academic institutions in the United States with master's- or doctorate-granting programs in science, engineering, and health. A total of 151 newly eligible institutions were added, and two private for-profit institutions offering mostly practitioner-based graduate degrees were determined to be ineligible.

^h In 2017, the data collection methods changed, substantially increasing the number of added units. In addition, several previously eligible fields became ineligible.

Note(s):

Percentages may not add to total because of rounding. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-7

Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2021–23

(Number and percent)

Year and field	Total in survey				Number imputed				Imputation rate (%)			
	Master's students		Doctoral students		Master's students		Doctoral students		Master's students		Doctoral students	
	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time
Fall 2023, all surveyed fields ^a	329,971	180,895	268,617	38,612	6,135	5,215	5,093	570	1.9	2.9	1.9	1.5
Science	222,976	125,544	188,995	23,974	4,322	4,093	3,257	365	1.9	3.3	1.7	1.5
Agricultural and veterinary sciences	4,186	2,715	4,133	721	35	24	2	17	0.8	0.9	*	2.4
Biological and biomedical sciences	29,180	15,523	56,973	3,890	292	314	800	17	1.0	2.0	1.4	0.4
Computer and information sciences	94,517	49,013	19,116	3,368	1,488	1,398	268	17	1.6	2.9	1.4	0.5
Geosciences, atmospheric, and ocean sciences	3,376	1,417	6,143	658	74	21	117	16	2.2	1.5	1.9	2.4
Mathematics and statistics	14,237	5,868	12,595	1,193	151	108	144	8	1.1	1.8	1.1	0.7
Multidisciplinary and interdisciplinary sciences	13,413	8,515	3,774	727	112	892	71	4	0.8	10.5	1.9	0.6
Natural resources and conservation	5,764	3,722	3,264	740	69	31	93	4	1.2	0.8	2.8	0.5
Physical sciences	3,471	2,529	36,004	2,325	71	32	465	5	2.0	1.3	1.3	0.2
Psychology	28,571	20,903	18,908	5,446	1,415	839	839	228	5.0	4.0	4.4	4.2
Social sciences	26,261	15,339	28,085	4,906	615	434	458	49	2.3	2.8	1.6	1.0
Engineering	65,160	35,407	66,447	8,545	925	444	1,555	129	1.4	1.3	2.3	1.5
Aerospace, aeronautical, and astronautical engineering	2,883	2,497	2,564	320	135	33	119	10	4.7	1.3	4.6	3.1
Biological, biomedical, and biosystems engineering	3,961	1,243	9,306	693	14	3	179	1	0.4	0.2	1.9	0.1
Chemical, petroleum, and chemical-related engineering	1,827	831	7,501	387	39	2	259	8	2.1	0.2	3.5	2.1
Civil, environmental, transportation and related engineering fields	7,984	4,098	6,946	906	179	20	170	20	2.2	0.5	2.4	2.2
Electrical, electronics, communications and computer engineering	21,886	9,207	15,471	2,235	274	140	406	46	1.3	1.5	2.6	2.1
Industrial, manufacturing, systems engineering and operations research	6,287	5,586	3,004	885	134	71	57	8	2.1	1.3	1.9	0.9
Mechanical engineering	9,861	5,474	10,462	1,217	102	100	229	32	1.0	1.8	2.2	2.6
Metallurgical, mining, materials and related engineering fields	1,619	843	4,371	411	5	2	93	2	0.3	0.2	2.1	0.5
Other engineering	8,852	5,628	6,822	1,491	43	73	43	2	0.5	1.3	0.6	0.1
Health	41,835	19,944	13,175	6,093	888	678	281	76	2.1	3.4	2.1	1.2
Clinical medicine	16,700	11,784	3,726	2,448	154	94	19	21	0.9	0.8	0.5	0.9
Other health	25,135	8,160	9,449	3,645	734	584	262	55	2.9	7.2	2.8	1.5
Fall 2022, all surveyed fields	319,618	181,693	259,683	37,540	4,004	2,305	1,444	305	1.3	1.3	0.6	0.8
Science	208,749	123,234	183,443	22,740	2,864	1,870	1,347	206	1.4	1.5	0.7	0.9
Agricultural and veterinary sciences	4,143	2,806	3,892	755	19	15	15	10	0.5	0.5	0.4	1.3
Biological and biomedical sciences	27,987	15,075	55,630	4,008	430	262	231	18	1.5	1.7	0.4	0.4
Computer and information sciences	83,708	46,264	17,544	3,039	558	334	111	61	0.7	0.7	0.6	2.0
Geosciences, atmospheric, and ocean sciences	3,621	1,565	6,126	658	34	13	0	0	0.9	0.8	0.0	0.0
Mathematics and statistics	14,239	6,559	12,359	1,230	78	100	0	0	0.5	1.5	0.0	0.0
Multidisciplinary and interdisciplinary sciences	9,767	7,164	3,281	733	25	29	322	0	0.3	0.4	9.8	0.0
Natural resources and conservation	6,010	3,797	3,151	804	27	24	48	4	0.4	0.6	1.5	0.5

TABLE A-7

Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2021–23

(Number and percent)

Year and field	Total in survey				Number imputed				Imputation rate (%)			
	Master's students		Doctoral students		Master's students		Doctoral students		Master's students		Doctoral students	
	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time
Physical sciences	3,726	2,530	35,286	2,550	84	33	94	22	2.3	1.3	0.3	0.9
Psychology	27,861	20,460	17,335	3,786	1,392	725	517	82	5.0	3.5	3.0	2.2
Social sciences	27,687	17,014	28,839	5,177	217	335	9	9	0.8	2.0	*	0.2
Engineering	66,427	36,593	64,020	8,960	203	224	61	24	0.3	0.6	0.1	0.3
Aerospace, aeronautical, and astronautical engineering	2,937	2,326	2,483	349	0	0	0	0	0.0	0.0	0.0	0.0
Biological, biomedical, and biosystems engineering	3,834	1,343	8,582	683	0	0	0	0	0.0	0.0	0.0	0.0
Chemical, petroleum, and chemical-related engineering	2,099	912	7,221	369	0	0	0	0	0.0	0.0	0.0	0.0
Civil, environmental, transportation and related engineering fields	8,215	4,406	6,705	1,049	5	3	5	0	0.1	0.1	0.1	0.0
Electrical, electronics, communications and computer engineering	22,725	9,591	15,157	2,428	100	54	39	12	0.4	0.6	0.3	0.5
Industrial, manufacturing, systems engineering and operations research	6,920	5,659	2,902	954	2	0	2	0	*	0.0	0.1	0.0
Mechanical engineering	10,423	5,606	10,273	1,250	27	63	4	2	0.3	1.1	*	0.2
Metallurgical, mining, materials and related engineering fields	1,667	878	4,221	352	5	2	0	0	0.3	0.2	0.0	0.0
Other engineering	7,607	5,872	6,476	1,526	64	102	11	10	0.8	1.7	0.2	0.7
Health	44,442	21,866	12,220	5,840	937	211	36	75	2.1	1.0	0.3	1.3
Clinical medicine	19,519	13,732	3,696	2,270	177	87	0	0	0.9	0.6	0.0	0.0
Other health	24,923	8,134	8,524	3,570	760	124	36	75	3.0	1.5	0.4	2.1
Fall 2021, all surveyed fields	286,954	179,659	256,869	36,674	3,539	1,895	3,932	564	1.2	1.1	1.5	1.5
Science	184,719	121,077	181,488	22,500	2,289	1,465	3,341	321	1.2	1.2	1.8	1.4
Agricultural and veterinary sciences	4,034	2,767	3,720	723	43	20	36	11	1.1	0.7	1.0	1.5
Biological and biomedical sciences	27,949	14,779	54,269	3,886	437	287	950	42	1.6	1.9	1.8	1.1
Computer and information sciences	58,913	43,286	16,724	2,807	720	317	329	103	1.2	0.7	2.0	3.7
Geosciences, atmospheric, and ocean sciences	3,731	1,789	6,132	638	24	25	157	0	0.6	1.4	2.6	0.0
Mathematics and statistics	14,157	6,482	12,365	1,254	77	93	177	3	0.5	1.4	1.4	0.2
Multidisciplinary and interdisciplinary sciences	6,602	5,392	3,048	726	43	77	45	18	0.7	1.4	1.5	2.5
Natural resources and conservation	6,343	3,669	3,133	777	18	37	39	19	0.3	1.0	1.2	2.4
Physical sciences	3,834	2,575	35,013	2,719	159	43	727	47	4.1	1.7	2.1	1.7
Psychology	30,052	21,826	17,647	3,800	534	293	204	41	1.8	1.3	1.2	1.1
Social sciences	29,104	18,512	29,437	5,170	234	273	677	37	0.8	1.5	2.3	0.7
Engineering	58,790	36,336	64,063	8,861	346	219	502	58	0.6	0.6	0.8	0.7
Aerospace, aeronautical, and astronautical engineering	2,755	2,310	2,406	367	13	1	36	0	0.5	*	1.5	0.0
Biological, biomedical, and biosystems engineering	3,900	1,292	8,166	701	48	11	95	3	1.2	0.9	1.2	0.4
Chemical, petroleum, and chemical-related engineering	2,053	930	7,363	350	1	2	65	3	*	0.2	0.9	0.9
Civil, environmental, transportation and related engineering fields	7,426	4,304	6,792	1,086	6	0	27	0	0.1	0.0	0.4	0.0
Electrical, electronics, communications and computer engineering	18,540	9,155	15,204	2,366	120	67	82	29	0.6	0.7	0.5	1.2

TABLE A-7

Imputation for nonresponse within graduate student totals, by field and type of graduate degree: 2021–23

(Number and percent)

Year and field	Total in survey				Number imputed				Imputation rate (%)			
	Master's students		Doctoral students		Master's students		Doctoral students		Master's students		Doctoral students	
	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time
Industrial, manufacturing, systems engineering and operations research	6,307	5,642	3,031	890	9	1	20	0	0.1	*	0.7	0.0
Mechanical engineering	9,930	5,788	10,306	1,234	78	74	79	5	0.8	1.3	0.8	0.4
Metallurgical, mining, materials and related engineering fields	1,662	856	4,509	395	6	4	51	0	0.4	0.5	1.1	0.0
Other engineering	6,217	6,059	6,286	1,472	65	59	47	18	1.0	1.0	0.7	1.2
Health	43,445	22,246	11,318	5,313	904	211	89	185	2.1	0.9	0.8	3.5
Clinical medicine	20,189	13,832	3,699	1,913	150	150	5	66	0.7	1.1	0.1	3.5
Other health	23,256	8,414	7,619	3,400	754	61	84	119	3.2	0.7	1.1	3.5

* = value < 0.05%.

^a For more information on the mapping of Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) fields and codes, see [technical table A-17](#).**Note(s):**

Clinical medicine includes graduate students in public health and in medical clinical sciences and clinical and medical laboratory sciences. Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-8

Imputation for nonresponse in totals for postdoctoral appointees and doctorate-holding nonfaculty researchers, by field: 2021–23

(Number and percent)

Year and field	Total in survey		Number imputed		Imputation rate (%)	
	Postdoctoral appointees	Doctorate-holding nonfaculty researchers	Postdoctoral appointees	Doctorate-holding nonfaculty researchers	Postdoctoral appointees	Doctorate-holding nonfaculty researchers
Fall 2023, all surveyed fields ^a	65,850	34,342	3,211	1,437	4.9	4.2
Science	37,982	20,600	1,040	756	2.7	3.7
Agricultural and veterinary sciences	1,993	1,238	1	6	0.1	0.5
Biological and biomedical sciences	19,520	8,589	651	354	3.3	4.1
Computer and information sciences	987	631	23	19	2.3	3.0
Geosciences, atmospheric, and ocean sciences	1,919	2,455	34	92	1.8	3.7
Mathematics and statistics	1,220	307	44	69	3.6	22.5
Multidisciplinary and interdisciplinary sciences	988	818	37	55	3.7	6.7
Natural resources and conservation	937	663	6	3	0.6	0.5
Physical sciences	7,220	3,095	150	92	2.1	3.0
Psychology	1,344	950	60	11	4.5	1.2
Social sciences	1,854	1,854	34	55	1.8	3.0
Engineering	9,051	4,575	400	366	4.4	8.0
Aerospace, aeronautical, and astronautical engineering	254	166	10	10	3.9	6.0
Biological, biomedical, and biosystems engineering	1,594	674	162	62	10.2	9.2
Chemical, petroleum, and chemical-related engineering	1,501	349	51	30	3.4	8.6
Civil, environmental, transportation and related engineering fields	1,070	654	28	65	2.6	9.9
Electrical, electronics, communications and computer engineering	1,339	799	26	33	1.9	4.1
Industrial, manufacturing, systems engineering and operations research	170	221	0	68	0.0	30.8
Mechanical engineering	1,317	560	68	35	5.2	6.3
Metallurgical, mining, materials and related engineering fields	557	249	11	2	2.0	0.8
Other engineering	1,249	903	44	61	3.5	6.8
Health	18,817	9,167	1,771	315	9.4	3.4
Clinical medicine ^b	16,393	7,798	1,599	275	9.8	3.5
Other health	2,424	1,369	172	40	7.1	2.9
Fall 2022, all surveyed fields	62,750	32,279	468	763	0.7	2.4
Science	36,673	19,423	222	350	0.6	1.8
Agricultural and veterinary sciences	1,705	1,068	8	6	0.5	0.6
Biological and biomedical sciences	19,585	8,207	129	207	0.7	2.5
Computer and information sciences	859	507	8	6	0.9	1.2
Geosciences, atmospheric, and ocean sciences	1,787	2,448	0	12	0.0	0.5
Mathematics and statistics	1,110	251	3	10	0.3	4.0
Multidisciplinary and interdisciplinary sciences	840	931	9	3	1.1	0.3
Natural resources and conservation	936	605	5	3	0.5	0.5
Physical sciences	6,877	2,894	22	63	0.3	2.2

TABLE A-8

Imputation for nonresponse in totals for postdoctoral appointees and doctorate-holding nonfaculty researchers, by field: 2021–23

(Number and percent)

Year and field	Total in survey		Number imputed		Imputation rate (%)	
	Postdoctoral appointees	Doctorate-holding nonfaculty researchers	Postdoctoral appointees	Doctorate-holding nonfaculty researchers	Postdoctoral appointees	Doctorate-holding nonfaculty researchers
Psychology	1,308	786	35	0	2.7	0.0
Social sciences	1,666	1,726	3	40	0.2	2.3
Engineering	8,335	4,355	95	136	1.1	3.1
Aerospace, aeronautical, and astronautical engineering	244	153	2	5	0.8	3.3
Biological, biomedical, and biosystems engineering	1,540	685	38	47	2.5	6.9
Chemical, petroleum, and chemical-related engineering	1,239	313	5	3	0.4	1.0
Civil, environmental, transportation and related engineering fields	1,018	569	4	9	0.4	1.6
Electrical, electronics, communications and computer engineering	1,217	734	3	27	0.2	3.7
Industrial, manufacturing, systems engineering and operations research	143	197	12	30	8.4	15.2
Mechanical engineering	1,189	527	18	2	1.5	0.4
Metallurgical, mining, materials and related engineering fields	542	280	11	2	2.0	0.7
Other engineering	1,203	897	2	11	0.2	1.2
Health	17,742	8,501	151	277	0.9	3.3
Clinical medicine ^b	15,630	7,351	135	244	0.9	3.3
Other health	2,112	1,150	16	33	0.8	2.9
Fall 2021, all surveyed fields	63,328	30,548	1,947	1,431	3.1	4.7
Science	37,189	18,728	1,456	1,160	3.9	6.2
Agricultural and veterinary sciences	1,595	902	5	9	0.3	1.0
Biological and biomedical sciences	20,245	8,187	1,198	651	5.9	8.0
Computer and information sciences	880	457	20	24	2.3	5.3
Geosciences, atmospheric, and ocean sciences	1,797	2,308	26	137	1.4	5.9
Mathematics and statistics	1,112	235	6	2	0.5	0.9
Multidisciplinary and interdisciplinary sciences	878	816	13	16	1.5	2.0
Natural resources and conservation	889	620	9	18	1.0	2.9
Physical sciences	6,823	2,895	140	215	2.1	7.4
Psychology	1,325	803	31	28	2.3	3.5
Social sciences	1,645	1,505	8	60	0.5	4.0
Engineering	8,340	3,992	123	113	1.5	2.8
Aerospace, aeronautical, and astronautical engineering	277	144	1	0	0.4	0.0
Biological, biomedical, and biosystems engineering	1,616	589	52	22	3.2	3.7
Chemical, petroleum, and chemical-related engineering	1,167	307	4	10	0.3	3.3
Civil, environmental, transportation and related engineering fields	968	479	10	19	1.0	4.0
Electrical, electronics, communications and computer engineering	1,275	755	16	43	1.3	5.7
Industrial, manufacturing, systems engineering and operations research	127	107	3	7	2.4	6.5
Mechanical engineering	1,200	529	22	6	1.8	1.1

TABLE A-8

Imputation for nonresponse in totals for postdoctoral appointees and doctorate-holding nonfaculty researchers, by field: 2021–23

(Number and percent)

Year and field	Total in survey		Number imputed		Imputation rate (%)	
	Postdoctoral appointees	Doctorate-holding nonfaculty researchers	Postdoctoral appointees	Doctorate-holding nonfaculty researchers	Postdoctoral appointees	Doctorate-holding nonfaculty researchers
Metallurgical, mining, materials and related engineering fields	562	259	11	2	2.0	0.8
Other engineering	1,148	823	4	4	0.3	0.5
Health	17,799	7,828	368	158	2.1	2.0
Clinical medicine ^b	15,561	6,751	285	150	1.8	2.2
Other health	2,238	1,077	83	8	3.7	0.7

^a For more information on the mapping of the Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) fields and codes, see [technical table A-17](#).

^b Clinical medicine includes postdoctoral appointees and nonfaculty researchers in medical clinical sciences, clinical and medical laboratory sciences, anesthesiology, cardiology, endocrinology, gastroenterology, hematology, neurology, obstetrics and gynecology, oncology and cancer research, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, public health, pulmonary disease, radiological sciences, surgery, and clinical medicine not elsewhere classified.

Note(s):

For postdoctoral appointees and doctorate-holding nonfaculty researchers, "field" refers to the field of the unit that reports information on these groups to the GSS. Sum of the broad fields may not add to total because of rounding.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering.

TABLE A-9

Imputation for graduate students in science, engineering, and health fields, by citizenship, ethnicity, race, enrollment status, and sex: 2023

(Number and percent)

Citizenship, ethnicity, and race	Part time			Full time						
	Total	Male	Female	Total	Male	Female	First time			
							Total	Male	Female	
Doctoral students, imputation rate (%)										
All doctoral students	1.5	2.0	2.1	1.9	7.5	7.5	2.5	5.5	5.5	
U.S. citizens and permanent residents ^a										
Hispanic or Latino	3.0	2.5	3.5	3.9	4.9	6.9	6.5	5.9	10.3	
Not Hispanic or Latino										
American Indian or Alaska Native	6.6	3.2	8.5	2.7	2.1	3.4	1.2	0.0	1.9	
Asian	1.6	1.2	1.9	2.0	4.6	3.7	3.2	4.7	3.0	
Black or African American	1.4	0.7	1.9	2.0	2.3	3.0	2.4	4.7	2.5	
Native Hawaiian or Other Pacific Islander	9.4	12.0	7.1	1.9	1.4	2.4	0.0	0.0	0.0	
White	2.4	2.9	2.7	2.3	6.3	6.0	2.9	5.1	4.1	
More than one race	3.2	1.6	4.4	1.5	2.9	2.7	1.3	3.0	1.3	
Unknown ethnicity and race	3.0	3.3	3.1	3.3	4.5	4.4	5.6	8.4	5.7	
Temporary visa holders	1.1	1.2	1.1	2.0	3.8	3.4	2.0	2.8	2.6	
Doctoral students, number imputed ^b										
All doctoral students	570	376	410	5,093	10,801	9,312	1,249	1,455	1,320	
U.S. citizens and permanent residents ^a										
Hispanic or Latino	92	33	61	746	441	709	238	97	211	
Not Hispanic or Latino										
American Indian or Alaska Native	12	2	10	16	5	12	1	0	1	
Asian	39	15	25	381	435	356	112	81	54	
Black or African American	54	9	46	217	93	205	50	35	33	
Native Hawaiian or Other Pacific Islander	5	3	2	3	1	2	0	0	0	
White	416	243	240	2,057	2,759	2,716	432	362	329	
More than one race	30	6	24	107	91	104	18	19	10	
Unknown ethnicity and race	54	27	30	226	154	149	64	46	34	
Temporary visa holders	103	67	38	2,301	2,747	1,530	470	393	242	
Master's students, imputation rate (%)										
All master's students	2.9	9.9	9.4	1.9	7.2	7.6	1.8	6.5	6.7	
U.S. citizens and permanent residents ^a										
Hispanic or Latino	3.8	5.5	9.0	5.7	5.6	7.9	4.9	4.4	7.0	
Not Hispanic or Latino										
American Indian or Alaska Native	3.1	1.4	4.7	4.8	5.0	4.6	3.9	3.4	4.2	
Asian	3.7	8.4	7.0	2.1	4.9	4.2	1.8	3.7	2.8	
Black or African American	3.3	4.2	5.6	2.8	3.6	4.1	2.5	3.8	3.6	

TABLE A-9

Imputation for graduate students in science, engineering, and health fields, by citizenship, ethnicity, race, enrollment status, and sex: 2023

(Number and percent)

Citizenship, ethnicity, and race	Part time			Full time					
				First time					
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Native Hawaiian or Other Pacific Islander	3.7	4.7	2.7	2.4	4.4	1.3	1.0	2.8	0.0
White	3.5	7.0	8.2	3.4	5.5	5.9	3.4	4.9	5.4
More than one race	2.6	3.9	5.8	2.3	3.8	2.9	1.9	3.0	2.0
Unknown ethnicity and race	4.9	8.9	12.5	5.1	6.8	8.8	4.8	4.9	7.1
Temporary visa holders	4.1	6.1	5.0	1.7	5.5	5.2	1.5	5.7	5.2
Master's students, number imputed ^b									
All master's students	5,215	9,246	8,221	6,135	11,911	12,493	2,786	5,059	5,040
U.S. citizens and permanent residents ^a									
Hispanic or Latino	847	560	1,075	1,476	516	1,337	570	187	515
Not Hispanic or Latino									
American Indian or Alaska Native	16	3	14	33	12	21	12	4	8
Asian	718	902	600	461	487	497	194	189	161
Black or African American	530	266	535	436	188	441	183	92	177
Native Hawaiian or Other Pacific Islander	11	7	4	6	4	2	1	1	0
White	2,737	2,775	3,115	2,916	1,804	3,090	1,294	746	1,249
More than one race	136	98	156	161	105	120	60	39	38
Unknown ethnicity and race	409	393	488	379	204	387	161	72	133
Temporary visa holders	1,277	1,168	605	2,879	5,595	3,361	1,190	2,750	1,569

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.^b This table reports the sum of counts imputed in each of these cells and variables. Because some units report totals without complete details, the sum of the imputed details will often be higher than the related total.**Note(s):**Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-10

Imputation for full-time graduate students in science, engineering, and health fields, by mechanism of support, sex, and source of support: 2023

(Number and percent)

Mechanism of support and sex	All sources	Federal								Domestic	Foreign	Institutional	Self-support
		DOD	DOE	HHS		NASA	NSF	USDA	Other				
				NIH	Other								
Doctoral students, imputation rate (%)													
All full-time doctoral students	1.9	8.3	6.1	7.2	5.4	8.4	9.6	3.5	10.5	9.7	6.7	9.9	12.1
Fellowships	9.2	4.4	5.4	6.7	3.5	13.5	11.1	2.4	21.6	15.4	10.2	8.6	na
Research assistantships	7.7	6.8	6.0	7.4	5.5	7.2	9.1	3.2	8.3	9.5	4.2	7.7	na
Teaching assistantships	12.4	na	11.2	na	2.0	12.9	7.6	13.3	7.7	7.4	8.3	12.6	na
Traineeships	6.7	36.8	0.0	6.5	6.1	20.0	6.2	0.0	0.3	5.1	50.0	6.8	na
Other types of support	11.6	25.4	11.9	10.0	8.9	9.1	21.1	9.1	19.2	7.2	8.9	10.3	12.1
Male	7.5	8.5	5.9	8.0	7.2	8.9	12.5	3.0	11.6	11.4	6.7	13.3	12.8
Female	7.5	7.8	6.8	7.7	13.2	7.8	10.9	4.6	11.6	10.6	6.7	13.5	13.1
Doctoral students, number imputed ^a													
All full-time doctoral students	5,093	525	316	1,588	139	158	1,831	76	822	1,487	155	15,753	3,011
Fellowships	3,828	18	12	148	4	31	405	2	182	270	36	2,741	na
Research assistantships	8,480	367	289	1,155	105	110	1,272	62	473	1,039	49	3,688	na
Teaching assistantships	7,636	na	10	na	2	4	70	6	13	43	23	7,500	na
Traineeships	641	7	0	237	22	9	20	0	1	19	2	306	na
Other types of support	5,203	132	5	48	7	3	73	6	153	120	45	1,589	3,011
Male	10,801	390	225	781	86	104	1,446	32	512	1,032	97	11,306	1,478
Female	9,312	139	96	951	180	55	822	49	394	660	58	9,980	1,759
Master's students, imputation rate (%)													
All full-time master's students	1.9	17.1	7.1	10.8	9.5	7.2	12.0	5.3	15.4	12.1	14.1	11.7	12.1
Fellowships	21.4	9.2	0.0	8.0	40.0	10.0	16.9	17.6	61.3	45.2	6.3	15.5	na
Research assistantships	9.8	10.9	5.5	11.8	3.5	7.3	11.3	3.7	9.5	10.9	11.6	10.1	na
Teaching assistantships	12.4	na	42.9	na	0.0	0.0	20.1	5.6	24.8	19.7	0.0	12.5	na
Traineeships	7.6	12.5	-	2.3	10.5	-	8.6	20.0	16.7	1.6	0.0	7.5	na
Other types of support	11.9	20.5	21.4	11.4	16.2	5.9	14.4	17.9	9.9	7.2	18.1	11.3	12.1
Male	7.2	18.5	7.9	12.7	6.8	6.8	13.3	4.2	21.0	12.4	12.8	12.8	17.8
Female	7.6	12.7	4.8	10.8	17.5	3.5	10.3	6.1	14.2	15.3	15.9	13.2	16.9
Master's students, number imputed ^a													
All full-time master's students	6,135	480	39	120	71	22	248	63	1,051	917	153	8,944	27,813
Fellowships	1,874	7	0	4	16	1	30	3	435	310	7	1,061	na
Research assistantships	2,274	99	27	98	14	20	159	39	155	273	22	1,368	na
Teaching assistantships	2,924	na	3	na	0	0	32	1	30	41	0	2,865	na
Traineeships	171	1	0	2	11	0	3	1	24	3	0	126	na
Other types of support	32,297	375	9	16	30	1	42	19	415	290	124	3,557	27,813

TABLE A-10

Imputation for full-time graduate students in science, engineering, and health fields, by mechanism of support, sex, and source of support: 2023

(Number and percent)

Mechanism of support and sex	All sources	Federal								Domestic	Foreign	Institutional	Self-support
		DOD	DOE	HHS		NASA	NSF	USDA	Other				
				NIH	Other								
Male	11,911	395	32	55	18	13	156	21	612	493	82	4,786	20,458
Female	12,493	87	7	73	85	4	93	42	553	553	71	5,185	19,246

- = not calculable. na = not applicable; not asked because this support mechanism does not apply.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a This table reports the sum of counts imputed in each of these cells and variables. Because some units report totals without complete details, the sum of the imputed details will often be higher than the related total.

Note(s):

Graduate student data in this table include master's students in health sciences. For more information on the comparability of these counts to other data published by the National Center for Science and Engineering Statistics, see the "[Technical Notes](#)."

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-11

Imputation for postdoctoral appointees in science, engineering, and health fields, by citizenship, ethnicity, race, and sex: 2023

(Number and percent)

Citizenship, ethnicity, and race	Total	Male	Female
Imputation rate (%)			
All postdoctoral appointees	4.9	6.8	7.5
U.S. citizens and permanent residents ^a			
Hispanic or Latino	7.9	7.6	9.4
Not Hispanic or Latino			
American Indian or Alaska Native	8.1	2.0	13.1
Asian	9.7	10.5	9.3
Black or African American	8.3	10.0	7.5
Native Hawaiian or Other Pacific Islander	1.8	0.0	3.7
White	7.4	8.4	9.6
More than one race	7.3	7.4	7.3
Unknown ethnicity and race	2.9	5.0	6.3
Temporary visa holders	10.2	11.0	11.5
Number imputed ^b			
All postdoctoral appointees	3,211	2,541	2,119
U.S. citizens and permanent residents ^a			
Hispanic or Latino	186	84	117
Not Hispanic or Latino			
American Indian or Alaska Native	9	1	8
Asian	544	329	232
Black or African American	102	52	53
Native Hawaiian or Other Pacific Islander	1	0	1
White	1,078	634	680
More than one race	51	24	27
Unknown ethnicity and race	89	81	89
Temporary visa holders	3,896	2,538	1,725

^a Ethnicity and race data are available only for U.S. citizens and permanent residents.^b This table reports the sum of counts imputed in each of these cells and variables. Because some units report totals without complete details, the sum of the imputed details will often be higher than the related total.**Source(s):**

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-12

Imputation for postdoctoral appointees in science, engineering, and health fields, by mechanism of support, source of support, and sex: 2023

(Number and percent)

Mechanism of support	All sources	Federal								Domestic	Foreign	Institutional	Self-support	Unknown	Male	Female
		DOD	DOE	HHS		NASA	NSF	USDA	Other							
				NIH	Other											
Imputation rate (%)																
All postdoctoral appointees	4.9	6.6	5.1	8.6	3.6	4.4	9.5	2.1	8.8	9.8	18.2	7.5	4.4	6.1	6.8	7.5
Fellowships	16.5	31.9	68.9	15.3	10.7	48.4	38.9	41.1	30.9	13.2	5.3	14.2	na	13.6	19.8	14.7
Research grant	8.5	6.0	4.6	10.4	2.4	4.0	8.3	2.8	10.6	7.5	5.2	6.0	na	20.6	10.7	11.3
Traineeship	8.9	0.0	0.0	11.8	5.3	0.0	17.9	0.0	0.0	5.6	0.0	3.3	na	18.5	8.9	9.3
Other support	15.2	17.9	3.2	21.2	25.0	0.0	11.6	0.0	18.2	26.7	51.5	12.3	4.4	13.3	14.9	16.4
Number imputed ^a																
All postdoctoral appointees	3,211	152	111	1,616	30	32	365	23	214	936	211	1,202	32	381	2,541	2,119
Fellowships	1,001	23	42	167	9	15	93	23	73	157	15	269	na	113	621	431
Research grant	3,452	126	93	1,588	15	27	282	24	210	451	27	368	na	226	2,580	1,888
Traineeship	299	0	0	225	6	0	10	0	0	12	0	31	na	15	141	167
Other support	2,378	20	2	93	2	0	18	0	36	569	175	867	32	559	1,286	1,145

na = not applicable; not asked because this support mechanism does not apply.

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NIH = National Institutes of Health; NSF = National Science Foundation; USDA = Department of Agriculture.

^a This table reports the sum of counts imputed in each of these cells and variables. Because some units report totals without complete details, the sum of the imputed details will often be higher than the related total.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-13

Imputation for postdoctoral appointees in science, engineering, and health fields, by mechanism of support, citizenship, and type of doctoral degree: 2023

(Number and percent)

Mechanism of support and citizenship	All doctoral degree types	Doctoral degree	Professional degree	Dual degree	Doctoral degree type unknown
Imputation rate (%)					
All postdoctoral appointees	4.9	10.0	16.0	12.5	4.1
Fellowships	16.5	19.7	4.2	4.0	14.5
Research grant	8.5	10.2	14.5	14.5	12.5
Traineeship	8.9	11.8	9.7	16.0	15.5
Other support	15.2	18.6	27.6	25.1	21.2
U.S. citizens and permanent residents	7.4	10.9	13.8	9.6	11.4
Foreign nationals with temporary visa	10.2	12.9	22.6	20.3	16.4
Number imputed ^a					
All postdoctoral appointees	3,211	4,697	723	143	539
Fellowships	1,001	733	26	4	238
Research grant	3,452	3,117	250	84	1,004
Traineeship	299	261	50	15	87
Other support	2,378	1,955	459	92	646
U.S. citizens and permanent residents	2,060	2,069	323	46	680
Foreign nationals with temporary visa	3,896	3,610	494	134	1,204

^a This table reports the sum of counts imputed in each of these cells and variables. Because some units report totals without complete details, the sum of the imputed details will often be higher than the related total.

Note(s):
 Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Source(s):
 National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-14

Imputation for postdoctoral appointees in science, engineering, and health fields, by origin of doctoral degree: 2023

(Number and percent)

Origin of doctoral degree	Imputation rate (%)	Number imputed
All postdoctoral appointees	4.9	3,211
United States	10.1	2,426
Foreign country	10.3	2,248
Unknown origin	18.2	3,634

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-15

Imputation for doctorate-holding nonfaculty researchers in science, engineering, and health, by type of doctoral degree and sex: 2023

(Number and percent)

Type of doctoral degree	Total	Male	Female
Imputation rate (%)			
All nonfaculty researchers	4.2	6.2	4.9
Doctoral degree	8.3	9.1	8.8
Professional degree	5.4	5.8	5.5
Dual degree	11.3	10.9	12.0
Doctoral degree type unknown	5.8	9.0	7.7
Number imputed ^a			
All nonfaculty researchers	1,437	1,202	729
Doctoral degree	1,988	1,289	854
Professional degree	124	66	64
Dual degree	62	29	34
Doctoral degree type unknown	438	352	280

^a This table reports the sum of counts imputed in each of these cells and variables. Because some units report totals without complete details, the sum of the imputed details will often be higher than the related total.

Note(s):

Doctoral degree includes PhD, ScD, DEng, etc.; professional degree includes MD, DVM, DO, DDS, etc.; dual degree includes both professional and doctoral degrees (MD-PhD, DVM-PhD, etc.).

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
01.0000	Agriculture, general		501	Agricultural sciences
01.0103	Agricultural economics		901	Agricultural and natural resource economics
01.0308	Agroecology and sustainable agriculture		501	Agricultural sciences
01.0603	Ornamental horticulture		501	Agricultural sciences
01.0701	International agriculture		501	Agricultural sciences
01.0901	Animal sciences, general		501	Agricultural sciences
01.0902	Agricultural animal breeding		501	Agricultural sciences
01.0903	Animal health		501	Agricultural sciences
01.0904	Animal nutrition		501	Agricultural sciences
01.0905	Dairy science		501	Agricultural sciences
01.0906	Livestock management		501	Agricultural sciences
01.0907	Poultry science		501	Agricultural sciences
01.0999	Animal sciences, other		501	Agricultural sciences
01.1001	Food science		501	Agricultural sciences
01.1002	Food technology and processing		501	Agricultural sciences
01.1099	Food science and technology, other		501	Agricultural sciences
01.1101	Plant sciences, general		501	Agricultural sciences
01.1102	Agronomy and crop science		501	Agricultural sciences
01.1103	Horticultural science		501	Agricultural sciences
01.1104	Agricultural and horticultural plant breeding		501	Agricultural sciences
01.1105	Plant protection and integrated pest management		501	Agricultural sciences
01.1106	Range science and management		501	Agricultural sciences
01.1199	Plant sciences, other		501	Agricultural sciences
01.1201	Soil science and agronomy, general		501	Agricultural sciences
01.1202	Soil chemistry and physics		501	Agricultural sciences
01.1203	Soil microbiology		501	Agricultural sciences
01.1299	Soil sciences, other		501	Agricultural sciences
01.8101	Veterinary sciences/ veterinary clinical sciences, general	DVM	502	Veterinary biomedical and clinical sciences
01.8102	Comparative and laboratory animal medicine	DVM	502	Veterinary biomedical and clinical sciences
01.8103	Large animal/ food animal and equine surgery and medicine	DVM	502	Veterinary biomedical and clinical sciences
01.8104	Small/ companion animal surgery and medicine	DVM	502	Veterinary biomedical and clinical sciences
01.8105	Veterinary anatomy	DVM	502	Veterinary biomedical and clinical sciences
01.8106	Veterinary infectious diseases	DVM	502	Veterinary biomedical and clinical sciences
01.8107	Veterinary microbiology and immunobiology	DVM	502	Veterinary biomedical and clinical sciences
01.8108	Veterinary pathology and pathobiology	DVM	502	Veterinary biomedical and clinical sciences
01.8109	Veterinary physiology	DVM	502	Veterinary biomedical and clinical sciences

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
01.8110	Veterinary preventive medicine, epidemiology, and public health	DVM	502	Veterinary biomedical and clinical sciences
01.8111	Veterinary toxicology and pharmacology	DVM	502	Veterinary biomedical and clinical sciences
01.8199	Veterinary biomedical and clinical sciences, other	DVM	502	Veterinary biomedical and clinical sciences
01.9999	Agricultural/ animal/ plant/ veterinary science and related fields, other		501	Agricultural sciences
03.0101	Natural resources/ conservation, general		511	Forestry, natural resources and conservation
03.0103	Environmental studies		510	Environmental science and studies
03.0104	Environmental science		510	Environmental science and studies
03.0199	Natural resources conservation and research, other		511	Forestry, natural resources and conservation
03.0201	Environmental/ natural resources management and policy, general		511	Forestry, natural resources and conservation
03.0204	Environmental/ natural resource economics		901	Agricultural and natural resource economics
03.0205	Water, wetlands, and marine resources management		511	Forestry, natural resources and conservation
03.0206	Land use planning and management/ development		511	Forestry, natural resources and conservation
03.0209	Energy and environmental policy		511	Forestry, natural resources and conservation
03.0210	Bioenergy		511	Forestry, natural resources and conservation
03.0299	Environmental/ natural resources management and policy, other		511	Forestry, natural resources and conservation
03.0301	Fishing and fisheries sciences and management		511	Forestry, natural resources and conservation
03.0501	Forestry, general		511	Forestry, natural resources and conservation
03.0502	Forest sciences and biology		511	Forestry, natural resources and conservation
03.0506	Forest management/ forest resources management		511	Forestry, natural resources and conservation
03.0508	Urban forestry		511	Forestry, natural resources and conservation
03.0509	Wood science and wood products/ pulp and paper technology/ technician		511	Forestry, natural resources and conservation
03.0510	Forest resources production and management		511	Forestry, natural resources and conservation
03.0599	Forestry, other		511	Forestry, natural resources and conservation
03.0601	Wildlife, fish and wildlands science and management		511	Forestry, natural resources and conservation
03.9999	Natural resources and conservation, other		511	Forestry, natural resources and conservation
05.0101	African studies		916	Area, ethnic, cultural, gender, and group studies
05.0102	American/ United States studies/ civilization		916	Area, ethnic, cultural, gender, and group studies
05.0103	Asian studies/ civilization		916	Area, ethnic, cultural, gender, and group studies
05.0104	East Asian studies		916	Area, ethnic, cultural, gender, and group studies
05.0105	Russian, Central European, East European and Eurasian studies		916	Area, ethnic, cultural, gender, and group studies
05.0106	European studies/ civilization		916	Area, ethnic, cultural, gender, and group studies
05.0107	Latin American studies		916	Area, ethnic, cultural, gender, and group studies
05.0108	Near and Middle Eastern studies		916	Area, ethnic, cultural, gender, and group studies
05.0109	Pacific Area/ Pacific rim studies		916	Area, ethnic, cultural, gender, and group studies
05.0110	Russian studies		916	Area, ethnic, cultural, gender, and group studies
05.0111	Scandinavian studies		916	Area, ethnic, cultural, gender, and group studies

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
05.0112	South Asian studies		916	Area, ethnic, cultural, gender, and group studies
05.0113	Southeast Asian studies		916	Area, ethnic, cultural, gender, and group studies
05.0114	Western European studies		916	Area, ethnic, cultural, gender, and group studies
05.0115	Canadian studies		916	Area, ethnic, cultural, gender, and group studies
05.0116	Balkans studies		916	Area, ethnic, cultural, gender, and group studies
05.0117	Baltic studies		916	Area, ethnic, cultural, gender, and group studies
05.0118	Slavic studies		916	Area, ethnic, cultural, gender, and group studies
05.0119	Caribbean studies		916	Area, ethnic, cultural, gender, and group studies
05.0120	Ural-Altaic and Central Asian studies		916	Area, ethnic, cultural, gender, and group studies
05.0121	Commonwealth studies		916	Area, ethnic, cultural, gender, and group studies
05.0122	Regional studies (U.S., Canadian, foreign)		916	Area, ethnic, cultural, gender, and group studies
05.0123	Chinese studies		916	Area, ethnic, cultural, gender, and group studies
05.0124	French studies		916	Area, ethnic, cultural, gender, and group studies
05.0125	German studies		916	Area, ethnic, cultural, gender, and group studies
05.0126	Italian studies		916	Area, ethnic, cultural, gender, and group studies
05.0127	Japanese studies		916	Area, ethnic, cultural, gender, and group studies
05.0128	Korean studies		916	Area, ethnic, cultural, gender, and group studies
05.0129	Polish studies		916	Area, ethnic, cultural, gender, and group studies
05.0130	Spanish and Iberian studies		916	Area, ethnic, cultural, gender, and group studies
05.0131	Tibetan studies		916	Area, ethnic, cultural, gender, and group studies
05.0132	Ukraine studies		916	Area, ethnic, cultural, gender, and group studies
05.0133	Irish studies		916	Area, ethnic, cultural, gender, and group studies
05.0134	Latin American and Caribbean studies		916	Area, ethnic, cultural, gender, and group studies
05.0135	Appalachian studies		916	Area, ethnic, cultural, gender, and group studies
05.0136	Arctic studies		916	Area, ethnic, cultural, gender, and group studies
05.0199	Area studies, other		916	Area, ethnic, cultural, gender, and group studies
05.0200	Ethnic studies		916	Area, ethnic, cultural, gender, and group studies
05.0201	African-American/ Black studies		916	Area, ethnic, cultural, gender, and group studies
05.0202	American Indian/ Native American studies		916	Area, ethnic, cultural, gender, and group studies
05.0203	Hispanic-American, Puerto Rican, and Mexican-American/ Chicano studies		916	Area, ethnic, cultural, gender, and group studies
05.0206	Asian-American studies		916	Area, ethnic, cultural, gender, and group studies
05.0207	Women's studies		916	Area, ethnic, cultural, gender, and group studies
05.0208	Gay/ lesbian studies		916	Area, ethnic, cultural, gender, and group studies
05.0209	Folklore studies		916	Area, ethnic, cultural, gender, and group studies
05.0210	Disability studies		916	Area, ethnic, cultural, gender, and group studies
05.0211	Deaf studies		916	Area, ethnic, cultural, gender, and group studies

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
05.0212	Comparative group studies		916	Area, ethnic, cultural, gender, and group studies
05.0299	Ethnic, cultural minority, gender, and group studies, other		916	Area, ethnic, cultural, gender, and group studies
05.9999	Area, ethnic, cultural, gender, and group studies, other		916	Area, ethnic, cultural, gender, and group studies
11.0101	Computer and information sciences, general	DCS, MBA	411	Computer and information science
11.0102	Artificial intelligence	DCS, MBA	416	Artificial intelligence, informatics and cis topics
11.0103	Information technology	DCS, MBA	414	Information technology
11.0104	Informatics	DCS, MBA	416	Artificial intelligence, informatics and cis topics
11.0105	Human-centered technology design	DCS, MBA	416	Artificial intelligence, informatics and cis topics
11.0199	Computer and information sciences, other	DCS, MBA	416	Artificial intelligence, informatics and cis topics
11.0401	Information science/ studies	DCS, MBA	415	Information science and studies
11.0501	Computer systems analysis/ analyst	DCS, MBA	412	Computer and information science, not elsewhere classified
11.0701	Computer science	DCS, MBA	410	Computer science
11.0802	Data modeling/ warehousing and database administration	DCS, MBA	412	Computer and information science, not elsewhere classified
11.0803	Computer graphics	DCS, MBA	412	Computer and information science, not elsewhere classified
11.0804	Modeling, virtual environments and simulation	DCS, MBA	412	Computer and information science, not elsewhere classified
11.0899	Computer software and media applications, other	DCS, MBA	412	Computer and information science, not elsewhere classified
11.0901	Computer systems networking and telecommunications	DCS, MBA	412	Computer and information science, not elsewhere classified
11.0902	Cloud computing	DCS, MBA	412	Computer and information science, not elsewhere classified
11.0999	Computer systems networking and telecommunications, other	DCS, MBA	412	Computer and information science, not elsewhere classified
11.1003	Computer and information systems security/ auditing/ information assurance	DCS, MBA	413	Computer and information systems security
11.1005	Information technology project management	DCS, MBA	412	Computer and information science, not elsewhere classified
11.9999	Computer and information sciences and support services, other	DCS, MBA	412	Computer and information science, not elsewhere classified
14.0101	Engineering, general		114	Engineering, not elsewhere classified
14.0103	Applied engineering		114	Engineering, not elsewhere classified
14.0201	Aerospace, aeronautical, and astronautical/ space engineering, general		101	Aerospace, aeronautical, and astronautical engineering
14.0202	Astronautical engineering		101	Aerospace, aeronautical, and astronautical engineering
14.0299	Aerospace, aeronautical, and astronautical/ space engineering, other		101	Aerospace, aeronautical, and astronautical engineering
14.0301	Agricultural engineering		102	Agricultural engineering
14.0401	Architectural engineering		117	Architectural, environmental, construction and surveying engineering
14.0501	Bioengineering and biomedical engineering		103	Bioengineering and biomedical engineering
14.0601	Ceramic sciences and engineering		110	Metallurgical and materials engineering
14.0701	Chemical engineering		104	Chemical engineering
14.0702	Chemical and biomolecular engineering		104	Chemical engineering
14.0799	Chemical engineering, other		104	Chemical engineering
14.0801	Civil engineering, general		105	Civil engineering
14.0802	Geotechnical and geoenvironmental engineering		105	Civil engineering

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
14.0803	Structural engineering		105	Civil engineering
14.0804	Transportation and highway engineering		105	Civil engineering
14.0805	Water resources engineering		105	Civil engineering
14.0899	Civil engineering, other		105	Civil engineering
14.0901	Computer engineering		118	Computer engineering
14.0902	Computer hardware engineering		118	Computer engineering
14.0903	Computer software engineering		118	Computer engineering
14.0999	Computer engineering, other		118	Computer engineering
14.1001	Electrical and electronics engineering		106	Electrical, electronics, and communications engineering
14.1003	Laser and optical engineering		106	Electrical, electronics, and communications engineering
14.1004	Telecommunications engineering		106	Electrical, electronics, and communications engineering
14.1099	Electrical, electronics, and communications engineering, other		106	Electrical, electronics, and communications engineering
14.1101	Engineering mechanics		107	Engineering mechanics, physics, and science
14.1201	Engineering physics/ applied physics		107	Engineering mechanics, physics, and science
14.1301	Engineering science		107	Engineering mechanics, physics, and science
14.1401	Environmental/ environmental health engineering		117	Architectural, environmental, construction and surveying engineering
14.1801	Materials engineering		110	Metallurgical and materials engineering
14.1901	Mechanical engineering		109	Mechanical engineering
14.2001	Metallurgical engineering		110	Metallurgical and materials engineering
14.2101	Mining and mineral engineering		111	Mining and mineral engineering
14.2201	Naval architecture and marine engineering		114	Engineering, not elsewhere classified
14.2301	Nuclear engineering		112	Nuclear engineering
14.2401	Ocean engineering		114	Engineering, not elsewhere classified
14.2501	Petroleum engineering		113	Petroleum engineering
14.2701	Systems engineering		119	Systems engineering and operations research
14.2801	Textile sciences and engineering		110	Metallurgical and materials engineering
14.3201	Polymer/ plastics engineering		104	Chemical engineering
14.3301	Construction engineering		117	Architectural, environmental, construction and surveying engineering
14.3401	Forest engineering		114	Engineering, not elsewhere classified
14.3501	Industrial engineering		108	Industrial and manufacturing engineering
14.3601	Manufacturing engineering		108	Industrial and manufacturing engineering
14.3701	Operations research		119	Systems engineering and operations research
14.3801	Surveying engineering		117	Architectural, environmental, construction and surveying engineering
14.3901	Geological/ geophysical engineering		111	Mining and mineral engineering
14.4001	Paper science and engineering		104	Chemical engineering
14.4101	Electromechanical engineering		109	Mechanical engineering

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
14.4201	Mechatronics, robotics, and automation engineering		109	Mechanical engineering
14.4301	Biochemical engineering		104	Chemical engineering
14.4401	Engineering chemistry		104	Chemical engineering
14.4501	Biological/ biosystems engineering		115	Biological and biosystems engineering
14.4701	Electrical and computer engineering		106	Electrical, electronics, and communications engineering
14.4801	Energy systems engineering, general		114	Engineering, not elsewhere classified
14.4802	Power plant engineering		114	Engineering, not elsewhere classified
14.4899	Energy systems engineering, other		114	Engineering, not elsewhere classified
14.9999	Engineering, other		114	Engineering, not elsewhere classified
15.1502	Engineering design		114	Engineering, not elsewhere classified
15.1601	Nanotechnology		116	Nanotechnology
16.0102	Linguistics		906	Linguistics
16.0105	Applied linguistics		906	Linguistics
16.0199	Linguistic, comparative, and related language studies and services, other		906	Linguistics
19.0701	Human development and family studies, general		915	Human development
19.0702	Adult development and aging		915	Human development
19.0706	Child development		915	Human development
26.0101	Biology/ biological sciences, general		603	Biology
26.0102	Biomedical sciences, general		623	Biomedical sciences
26.0202	Biochemistry		602	Biochemistry
26.0203	Biophysics		605	Biophysics
26.0204	Molecular biology		622	Molecular biology
26.0205	Molecular biochemistry		602	Biochemistry
26.0206	Molecular biophysics		605	Biophysics
26.0207	Structural biology		622	Molecular biology
26.0208	Photobiology		622	Molecular biology
26.0209	Radiation biology/ radiobiology		622	Molecular biology
26.021	Biochemistry and molecular biology		602	Biochemistry
26.0299	Biochemistry, biophysics and molecular biology, other		602	Biochemistry
26.0301	Botany/ plant biology		606	Botany and plant biology
26.0305	Plant pathology/ phytopathology		606	Botany and plant biology
26.0307	Plant physiology		606	Botany and plant biology
26.0308	Plant molecular biology		606	Botany and plant biology
26.0399	Botany/ plant biology, other		606	Botany and plant biology
26.0401	Cell/ cellular biology and histology		619	Cell, cellular biology and anatomical sciences
26.0403	Anatomy		619	Cell, cellular biology and anatomical sciences

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
26.0404	Developmental biology and embryology		619	Cell, cellular biology and anatomical sciences
26.0406	Cell/ cellular and molecular biology		619	Cell, cellular biology and anatomical sciences
26.0407	Cell biology and anatomy		619	Cell, cellular biology and anatomical sciences
26.0499	Cell/ cellular biology and anatomical sciences, other		619	Cell, cellular biology and anatomical sciences
26.0502	Microbiology, general		611	Microbiological sciences and immunology
26.0503	Medical microbiology and bacteriology		611	Microbiological sciences and immunology
26.0504	Virology		611	Microbiological sciences and immunology
26.0505	Parasitology		611	Microbiological sciences and immunology
26.0506	Mycology		611	Microbiological sciences and immunology
26.0507	Immunology		611	Microbiological sciences and immunology
26.0508	Microbiology and immunology		611	Microbiological sciences and immunology
26.0509	Infectious disease and global health		611	Microbiological sciences and immunology
26.0599	Microbiological sciences and immunology, other		611	Microbiological sciences and immunology
26.0701	Zoology/ animal biology		616	Zoology and animal biology
26.0702	Entomology		616	Zoology and animal biology
26.0707	Animal physiology		616	Zoology and animal biology
26.0708	Animal behavior and ethology		616	Zoology and animal biology
26.0709	Wildlife biology		616	Zoology and animal biology
26.0799	Zoology/ animal biology, other		616	Zoology and animal biology
26.0801	Genetics, general		610	Genetics
26.0802	Molecular genetics		610	Genetics
26.0803	Microbial and eukaryotic genetics		610	Genetics
26.0804	Animal genetics		610	Genetics
26.0805	Plant genetics		610	Genetics
26.0806	Human/ medical genetics		610	Genetics
26.0807	Genome sciences/ genomics		610	Genetics
26.0899	Genetics, other		610	Genetics
26.0901	Physiology, general		615	Physiology
26.0902	Molecular physiology		615	Physiology
26.0903	Cell physiology		615	Physiology
26.0904	Endocrinology		615	Physiology
26.0905	Reproductive biology		615	Physiology
26.0907	Cardiovascular science		615	Physiology
26.0908	Exercise physiology and kinesiology		615	Physiology
26.0909	Vision science/ physiological optics		615	Physiology
26.091	Pathology/ experimental pathology		613	Pathology/experimental pathology

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
26.0911	Oncology and cancer biology		615	Physiology
26.0912	Aerospace physiology and medicine		615	Physiology
26.0913	Biomechanics		615	Physiology
26.0999	Physiology, pathology, and related sciences, other		615	Physiology
26.1001	Pharmacology		614	Pharmacology and toxicology
26.1002	Molecular pharmacology		614	Pharmacology and toxicology
26.1003	Neuropharmacology		614	Pharmacology and toxicology
26.1004	Toxicology		614	Pharmacology and toxicology
26.1005	Molecular toxicology		614	Pharmacology and toxicology
26.1006	Environmental toxicology		614	Pharmacology and toxicology
26.1007	Pharmacology and toxicology		614	Pharmacology and toxicology
26.1099	Pharmacology and toxicology, other		614	Pharmacology and toxicology
26.1101	Biometry/ biometrics		618	Biostatistics and bioinformatics
26.1102	Biostatistics		618	Biostatistics and bioinformatics
26.1103	Bioinformatics		618	Biostatistics and bioinformatics
26.1104	Computational biology		618	Biostatistics and bioinformatics
26.1199	Biomathematics, bioinformatics, and computational biology, other		618	Biostatistics and bioinformatics
26.1201	Biotechnology		624	Biotechnology
26.1301	Ecology		620	Ecology and population biology
26.1302	Marine biology and biological oceanography		303	Ocean and marine sciences
26.1303	Evolutionary biology		620	Ecology and population biology
26.1304	Aquatic biology/ limnology		620	Ecology and population biology
26.1305	Environmental biology		620	Ecology and population biology
26.1306	Population biology		620	Ecology and population biology
26.1307	Conservation biology		620	Ecology and population biology
26.1308	Systematic biology/ biological systematics		620	Ecology and population biology
26.1309	Epidemiology		621	Epidemiology
26.131	Ecology and evolutionary biology		620	Ecology and population biology
26.1311	Epidemiology and biostatistics		621	Epidemiology
26.1399	Ecology, evolution, systematics and population biology, other		620	Ecology and population biology
26.1401	Molecular medicine		617	Biological and biomedical sciences, not elsewhere classified
26.1501	Neuroscience		950	Neurobiology and neuroscience
26.1502	Neuroanatomy		950	Neurobiology and neuroscience
26.1503	Neurobiology and anatomy		950	Neurobiology and neuroscience
26.1504	Neurobiology and behavior		950	Neurobiology and neuroscience
26.1599	Neurobiology and neurosciences, other		950	Neurobiology and neuroscience

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
26.9999	Biological and biomedical sciences, other		617	Biological and biomedical sciences, not elsewhere classified
27.0101	Mathematics, general		405	Mathematics
27.0102	Algebra and number theory		405	Mathematics
27.0103	Analysis and functional analysis		405	Mathematics
27.0104	Geometry/ geometric analysis		405	Mathematics
27.0105	Topology and foundations		405	Mathematics
27.0199	Mathematics, other		405	Mathematics
27.0301	Applied mathematics, general		404	Applied mathematics
27.0303	Computational mathematics		404	Applied mathematics
27.0304	Computational and applied mathematics		404	Applied mathematics
27.0305	Financial mathematics		404	Applied mathematics
27.0306	Mathematical biology		404	Applied mathematics
27.0399	Applied mathematics, other		404	Applied mathematics
27.0501	Statistics, general		403	Statistics
27.0502	Mathematical statistics and probability		403	Statistics
27.0503	Mathematics and statistics		403	Statistics
27.0599	Statistics, other		403	Statistics
27.0601	Applied statistics, general		403	Statistics
27.9999	Mathematics and statistics, other		403	Statistics
30.0101	Biological and physical sciences		982	Biological and physical sciences
30.0501	Peace studies and conflict resolution		980	Multidisciplinary and interdisciplinary sciences
30.0601	Systems science and theory		980	Multidisciplinary and interdisciplinary sciences
30.0801	Mathematics and computer science		980	Multidisciplinary and interdisciplinary sciences
30.1001	Biopsychology		980	Multidisciplinary and interdisciplinary sciences
30.1101	Gerontology		980	Multidisciplinary and interdisciplinary sciences
30.1501	Science, technology and society		980	Multidisciplinary and interdisciplinary sciences
30.1601	Accounting and computer science		980	Multidisciplinary and interdisciplinary sciences
30.1701	Behavioral sciences		980	Multidisciplinary and interdisciplinary sciences
30.1801	Natural sciences		980	Multidisciplinary and interdisciplinary sciences
30.1901	Nutrition sciences		612	Nutrition science
30.2001	International/ globalization studies		983	International and global studies
30.2101	Holocaust and related studies		980	Multidisciplinary and interdisciplinary sciences
30.2301	Intercultural/ multicultural and diversity studies		980	Multidisciplinary and interdisciplinary sciences
30.2501	Cognitive science, general		980	Multidisciplinary and interdisciplinary sciences
30.2599	Cognitive science, other		980	Multidisciplinary and interdisciplinary sciences
30.2701	Human biology		980	Multidisciplinary and interdisciplinary sciences

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
30.3001	Computational science		981	Computational science
30.3101	Human computer interaction		980	Multidisciplinary and interdisciplinary sciences
30.3201	Marine sciences		303	Ocean and marine sciences
30.3401	Anthrozoology		980	Multidisciplinary and interdisciplinary sciences
30.3501	Climate science		980	Multidisciplinary and interdisciplinary sciences
30.3601	Cultural studies and comparative literature		916	Area, ethnic, cultural, gender, and group studies
30.3701	Design for human health		722	Health-related, not elsewhere classified
30.3801	Earth systems science		302	Geological and earth sciences
30.3901	Economics and computer science		980	Multidisciplinary and interdisciplinary sciences
30.4001	Economics and foreign language/ literature		903	Economics
30.4101	Environmental geosciences		980	Multidisciplinary and interdisciplinary sciences
30.4201	Geoarchaeology		980	Multidisciplinary and interdisciplinary sciences
30.4301	Geobiology		980	Multidisciplinary and interdisciplinary sciences
30.4401	Geography and environmental studies		980	Multidisciplinary and interdisciplinary sciences
30.4701	Linguistics and anthropology		910	Social sciences, not elsewhere classified
30.4801	Linguistics and computer science		980	Multidisciplinary and interdisciplinary sciences
30.4901	Mathematical economics		980	Multidisciplinary and interdisciplinary sciences
30.5001	Mathematics and atmospheric/ oceanic science		303	Ocean and marine sciences
30.5101	Philosophy, politics, and economics		910	Social sciences, not elsewhere classified
30.5301	Thanatology		980	Multidisciplinary and interdisciplinary sciences
30.7001	Data science, general	MBA	984	Data science and data analytics
30.7099	Data science, other	MBA	984	Data science and data analytics
30.7101	Data analytics, general	MBA	984	Data science and data analytics
30.7103	Data visualization	MBA	984	Data science and data analytics
30.7199	Data analytics, other	MBA	984	Data science and data analytics
31.0505	Exercise science and kinesiology		724	Kinesiology and exercise science
38.0102	Logic		405	Mathematics
40.0101	Physical sciences, general		204	Physical sciences, not elsewhere classified
40.0201	Astronomy		201	Astronomy and astrophysics
40.0202	Astrophysics		201	Astronomy and astrophysics
40.0203	Planetary astronomy and science		201	Astronomy and astrophysics
40.0299	Astronomy and astrophysics, other		201	Astronomy and astrophysics
40.0401	Atmospheric sciences and meteorology, general		301	Atmospheric sciences and meteorology
40.0402	Atmospheric chemistry and climatology		301	Atmospheric sciences and meteorology
40.0403	Atmospheric physics and dynamics		301	Atmospheric sciences and meteorology
40.0404	Meteorology		301	Atmospheric sciences and meteorology

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
40.0499	Atmospheric sciences and meteorology, other		301	Atmospheric sciences and meteorology
40.0501	Chemistry, general		202	Chemistry
40.0502	Analytical chemistry		202	Chemistry
40.0503	Inorganic chemistry		202	Chemistry
40.0504	Organic chemistry		202	Chemistry
40.0506	Physical chemistry		202	Chemistry
40.0507	Polymer chemistry		202	Chemistry
40.0508	Chemical physics		202	Chemistry
40.0509	Environmental chemistry		202	Chemistry
40.051	Forensic chemistry		202	Chemistry
40.0511	Theoretical chemistry		202	Chemistry
40.0512	Cheminformatics/ chemistry informatics		202	Chemistry
40.0599	Chemistry, other		202	Chemistry
40.0601	Geology/ earth science, general		302	Geological and earth sciences
40.0602	Geochemistry		302	Geological and earth sciences
40.0603	Geophysics and seismology		302	Geological and earth sciences
40.0604	Paleontology		302	Geological and earth sciences
40.0605	Hydrology and water resources science		302	Geological and earth sciences
40.0606	Geochemistry and petrology		302	Geological and earth sciences
40.0607	Oceanography, chemical and physical		303	Ocean and marine sciences
40.0699	Geological and earth sciences/ geosciences, other		302	Geological and earth sciences
40.0801	Physics, general		203	Physics
40.0802	Atomic/ molecular physics		203	Physics
40.0804	Elementary particle physics		203	Physics
40.0805	Plasma and high-temperature physics		203	Physics
40.0806	Nuclear physics		203	Physics
40.0807	Optics/ optical sciences		203	Physics
40.0808	Condensed matter and materials physics		203	Physics
40.0809	Acoustics		203	Physics
40.081	Theoretical and mathematical physics		203	Physics
40.0899	Physics, other		203	Physics
40.1001	Materials science		205	Materials sciences
40.1002	Materials chemistry		205	Materials sciences
40.1099	Materials sciences, other		205	Materials sciences
40.1101	Physics and astronomy		204	Physical sciences, not elsewhere classified
40.9999	Physical sciences, other		204	Physical sciences, not elsewhere classified

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
42.0101	Psychology, general	PsyD	801	Psychology, general
42.2701	Cognitive psychology and psycholinguistics	PsyD	805	Research and experimental psychology
42.2702	Comparative psychology	PsyD	805	Research and experimental psychology
42.2703	Developmental and child psychology	PsyD	805	Research and experimental psychology
42.2704	Experimental psychology	PsyD	805	Research and experimental psychology
42.2705	Personality psychology	PsyD	805	Research and experimental psychology
42.2706	Behavioral neuroscience	PsyD	805	Research and experimental psychology
42.2707	Social psychology	PsyD	805	Research and experimental psychology
42.2708	Psychometrics and quantitative psychology	PsyD	805	Research and experimental psychology
42.2709	Psychopharmacology	PsyD	805	Research and experimental psychology
42.271	Developmental and adolescent psychology	PsyD	805	Research and experimental psychology
42.2799	Research and experimental psychology, other	PsyD	805	Research and experimental psychology
42.2801	Clinical psychology	PsyD	803	Clinical psychology
42.2802	Community psychology	PsyD	804	Applied psychology
42.2803	Counseling psychology	PsyD	806	Counseling psychology
42.2804	Industrial and organizational psychology	PsyD	804	Applied psychology
42.2805	School psychology	PsyD	804	Applied psychology
42.2806	Educational psychology	PsyD	804	Applied psychology
42.2807	Clinical child psychology	PsyD	803	Clinical psychology
42.2808	Environmental psychology	PsyD	804	Applied psychology
42.2809	Geropsychology	PsyD	804	Applied psychology
42.281	Health/ medical psychology	PsyD	804	Applied psychology
42.2811	Family psychology	PsyD	804	Applied psychology
42.2812	Forensic psychology	PsyD	804	Applied psychology
42.2813	Applied psychology	PsyD	804	Applied psychology
42.2814	Applied behavior analysis	PsyD	804	Applied psychology
42.2815	Performance and sport psychology	PsyD	804	Applied psychology
42.2899	Clinical, counseling and applied psychology, other	PsyD	804	Applied psychology
42.9999	Psychology, other	PsyD	804	Applied psychology
43.0104	Criminal justice/ safety studies		911	Criminal justice - safety studies
44.0501	Public policy analysis, general		914	Public policy analysis
44.0502	Education policy analysis		914	Public policy analysis
44.0503	Health policy analysis		914	Public policy analysis
44.0504	International policy analysis		914	Public policy analysis
44.0599	Public policy analysis, other		914	Public policy analysis
45.0101	Social sciences, general		910	Social sciences, not elsewhere classified

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
45.0102	Research methodology and quantitative methods		910	Social sciences, not elsewhere classified
45.0103	Survey research/ methodology		910	Social sciences, not elsewhere classified
45.0201	Anthropology, general		902	Anthropology
45.0202	Physical and biological anthropology		902	Anthropology
45.0203	Medical anthropology		902	Anthropology
45.0204	Cultural anthropology		902	Anthropology
45.0205	Forensic anthropology		902	Anthropology
45.0299	Anthropology, other		902	Anthropology
45.0301	Archeology		910	Social sciences, not elsewhere classified
45.0401	Criminology		917	Criminology
45.0501	Demography and population studies		908	Sociology and demography
45.0502	Applied demography		908	Sociology and demography
45.0599	Demography, other		908	Sociology and demography
45.0601	Economics, general		903	Economics
45.0602	Applied economics		903	Economics
45.0603	Econometrics and quantitative economics		903	Economics
45.0604	Development economics and international development		903	Economics
45.0605	International economics		903	Economics
45.0699	Economics, other		903	Economics
45.0701	Geography		904	Geography and cartography
45.0702	Geographic information science and cartography		904	Geography and cartography
45.0799	Geography, other		904	Geography and cartography
45.0901	International relations and affairs		912	International relations and national security studies
45.0902	National security policy studies		912	International relations and national security studies
45.0999	International relations and national security studies, other		912	International relations and national security studies
45.1001	Political science and government, general		907	Political science and government
45.1002	American government and politics (United States)		907	Political science and government
45.1003	Canadian government and politics		907	Political science and government
45.1004	Political economy		907	Political science and government
45.1099	Political science and government, other		907	Political science and government
45.1101	Sociology, general		908	Sociology and demography
45.1102	Applied/ public sociology		908	Sociology and demography
45.1103	Rural sociology		908	Sociology and demography
45.1199	Sociology, other		908	Sociology and demography
45.1201	Urban studies/ affairs		918	Urban studies and affairs
45.1301	Sociology and anthropology		908	Sociology and demography

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
45.1501	Geography and anthropology		910	Social sciences, not elsewhere classified
45.9999	Social sciences, other		910	Social sciences, not elsewhere classified
51	Health services/ allied health/ health sciences, general	DPT, DScPT, OTD	722	Health-related, not elsewhere classified
51.0201	Communication sciences and disorders, general	AuD, SLPD	723	Communication disorders sciences
51.0202	Audiology/ audiologist	AuD, SLPD	723	Communication disorders sciences
51.0203	Speech-language pathology/ pathologist	AuD, SLPD	723	Communication disorders sciences
51.0204	Audiology/ audiologist and speech-language pathology/ pathologist	AuD, SLPD	723	Communication disorders sciences
51.0299	Communication disorders sciences and services, other	AuD, SLPD	723	Communication disorders sciences
51.0501	Dental clinical sciences, general	DDS	718	Dental sciences
51.0503	Oral biology and oral and maxillofacial pathology	DDS	718	Dental sciences
51.0504	Dental public health and education	DDS	718	Dental sciences
51.0505	Dental materials	DDS	718	Dental sciences
51.0506	Endodontics/ endodontology	DDS	718	Dental sciences
51.0507	Oral/ maxillofacial surgery	DDS	718	Dental sciences
51.0508	Orthodontics/ orthodontology	DDS	718	Dental sciences
51.0509	Pediatric dentistry/ pedodontics	DDS	718	Dental sciences
51.051	Periodontics/ periodontology	DDS	718	Dental sciences
51.0511	Prosthodontics/ prosthodontology	DDS	718	Dental sciences
51.0512	Digital dentistry	DDS	718	Dental sciences
51.0513	Geriatric dentistry	DDS	718	Dental sciences
51.0514	Implantology/ implant dentistry	DDS	718	Dental sciences
51.0599	Advanced/ graduate dentistry and oral sciences, other	DDS	718	Dental sciences
51.1003	Hematology technology/ technician	Master's, DN, DO, DPM, MD, OD	725	Clinical and medical laboratory science
51.1004	Clinical/ medical laboratory technician	Master's, DN, DO, DPM, MD, OD	725	Clinical and medical laboratory science
51.1005	Clinical laboratory science/ medical technology/ technologist	Master's, DN, DO, DPM, MD, OD	725	Clinical and medical laboratory science
51.101	Cytogenetics/ genetics/ clinical genetics technology/ technologist	Master's, DN, DO, DPM, MD, OD	725	Clinical and medical laboratory science
51.1099	Clinical/ medical laboratory science and allied professions, other	Master's, DN, DO, DPM, MD, OD	725	Clinical and medical laboratory science
51.1401	Medical science/ scientist	DN, DO, DPM, MD, OD	730	Medical clinical sciences
51.1402	Clinical and translational science	DN, DO, DPM, MD, OD	730	Medical clinical sciences
51.1403	Pain management	DN, DO, DPM, MD, OD	730	Medical clinical sciences
51.1404	Temporomandibular disorders and orofacial pain	DN, DO, DPM, MD, OD	730	Medical clinical sciences
51.1405	Tropical medicine	DN, DO, DPM, MD, OD	730	Medical clinical sciences
51.1499	Medical clinical sciences/ graduate medical studies, other	DN, DO, DPM, MD, OD	730	Medical clinical sciences
51.2002	Pharmacy administration and pharmacy policy and regulatory affairs	Master's, PharmD	720	Pharmaceutical sciences
51.2003	Pharmaceutics and drug design	PharmD	720	Pharmaceutical sciences
51.2004	Medicinal and pharmaceutical chemistry	PharmD	720	Pharmaceutical sciences

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
51.2005	Natural products chemistry and pharmacognosy	PharmD	720	Pharmaceutical sciences
51.2006	Clinical and industrial drug development	PharmD	720	Pharmaceutical sciences
51.2007	Pharmacoeconomics/ pharmaceutical economics	PharmD	720	Pharmaceutical sciences
51.2009	Industrial and physical pharmacy and cosmetic sciences	PharmD	720	Pharmaceutical sciences
51.201	Pharmaceutical sciences	PharmD	720	Pharmaceutical sciences
51.2099	Pharmacy, pharmaceutical sciences, and administration, other	Master's, PharmD	720	Pharmaceutical sciences
51.2201	Public health, general	MHSA, MBA	712	Public health
51.2202	Environmental health		712	Public health
51.2205	Health/ medical physics		712	Public health
51.2206	Occupational health and industrial hygiene		712	Public health
51.2207	Public health education and promotion		712	Public health
51.2208	Community health and preventive medicine		712	Public health
51.2209	Maternal and child health		712	Public health
51.221	International public health/ international health		712	Public health
51.2211	Health services administration	MHSA, MBA	712	Public health
51.2212	Behavioral aspects of health		712	Public health
51.2213	Patient safety and healthcare quality		712	Public health
51.2214	Public health genetics		712	Public health
51.2299	Public health, other	MHSA, MBA	712	Public health
51.2306	Occupational therapy/ therapist	Master's, OTD	722	Health-related, not elsewhere classified
51.2308	Physical therapy/ therapist	Master's, DPT, DScPT	722	Health-related, not elsewhere classified
51.2314	Rehabilitation science	DPT, DScPT, OTD	722	Health-related, not elsewhere classified
51.2706	Medical informatics	MBA	722	Health-related, not elsewhere classified
51.3201	Bioethics/ medical ethics		722	Health-related, not elsewhere classified
51.3205	History of medicine		722	Health-related, not elsewhere classified
51.3801	Registered nursing/ registered nurse	Master's, ND, DNP	719	Nursing
51.3802	Nursing administration	Master's, ND, DNP	719	Nursing
51.3804	Nurse anesthetist	Master's, ND, DNP	719	Nursing
51.3808	Nursing science	ND, DNP	719	Nursing
51.3899	Registered nursing, nursing administration, nursing research and clinical nursing, other	Master's, ND, DNP	719	Nursing
51.9999	Health professions and related clinical sciences, other	Master's	722	Health-related, not elsewhere classified
54.0104	History and philosophy of science and technology		905	History and philosophy of science and technology
01.8001	Veterinary medicine	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
15.0401	Biomedical technology/ technician	Postdocs and NFRs only	103	Bioengineering and biomedical engineering
51.0401	Dentistry	Postdocs and NFRs only	718	Dental sciences
51.0502	Advanced general dentistry	Postdocs and NFRs only	718	Dental sciences

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
51.1201	Medicine	Postdocs and NFRs only	var	Must be reported using GSS code
51.1299	Medicine, other	Postdocs and NFRs only	var	Must be reported using GSS code
51.2001	Pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0101	Oral and maxillofacial surgery	Postdocs and NFRs only	718	Dental sciences
60.0102	Dental public health	Postdocs and NFRs only	718	Dental sciences
60.0103	Endodontics	Postdocs and NFRs only	718	Dental sciences
60.0104	Oral and maxillofacial pathology	Postdocs and NFRs only	718	Dental sciences
60.0105	Orthodontics	Postdocs and NFRs only	718	Dental sciences
60.0106	Pediatric dentistry	Postdocs and NFRs only	718	Dental sciences
60.0107	Periodontology	Postdocs and NFRs only	718	Dental sciences
60.0108	Prosthodontics	Postdocs and NFRs only	718	Dental sciences
60.0109	Oral and maxillofacial radiology	Postdocs and NFRs only	718	Dental sciences
60.0199	Dental, other	Postdocs and NFRs only	718	Dental sciences
60.0301	Veterinary anesthesiology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0302	Veterinary dentistry	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0303	Veterinary dermatology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0304	Veterinary emergency and critical care medicine	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0305	Veterinary internal medicine	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0306	Laboratory animal medicine	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0307	Veterinary microbiology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0308	Veterinary nutrition	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0309	Veterinary ophthalmology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.031	Veterinary pathology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0311	Veterinary practice	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0312	Veterinary preventive medicine	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0313	Veterinary radiology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0314	Veterinary surgery	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0315	Theriogenology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0316	Veterinary toxicology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0317	Zoological medicine	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0318	Poultry veterinarian	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0319	Veterinary behaviorist	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.032	Veterinary clinical pharmacology	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0399	Veterinary specialties, other	Postdocs and NFRs only	502	Veterinary biomedical and clinical sciences
60.0701	Nurse practitioner, general	Postdocs and NFRs only	719	Nursing
60.0702	Combined nurse practitioner	Postdocs and NFRs only	719	Nursing

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
60.0703	Acute care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0704	Adult/ gerontology acute care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0705	Adult/ gerontology critical care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0706	Cardiology/ cardiovascular nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0707	Clinical informatics nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0708	Dermatology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0709	Developmental and behavioral pediatrics nurse practitioner	Postdocs and NFRs only	719	Nursing
60.071	Diabetes nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0711	Emergency medicine nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0712	Endocrinology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0713	Family medicine nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0714	Gastroenterology and hepatology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0715	Gastroenterology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0716	Genetics nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0717	Gerontology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0718	Global health nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0719	Hematology-oncology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.072	Hepatology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0721	Home-based primary care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0722	Hospice and palliative medicine nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0723	Hospital medicine nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0724	Infectious diseases nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0725	Neonatal nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0726	Nephrology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0727	Neurology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0728	Neuroscience nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0729	Obstetrics and gynecology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.073	Occupational health nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0731	Orthopedic nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0732	Orthopedic surgery nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0733	Pain management nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0734	Palliative care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0735	Pediatric hematology-oncology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0736	Pediatric nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0737	Pediatric rehabilitation nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0738	Psychiatric/ mental health nurse practitioner	Postdocs and NFRs only	719	Nursing

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
60.0739	Public/ community health nurse practitioner	Postdocs and NFRs only	719	Nursing
60.074	Pulmonary nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0741	Rheumatology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0742	Rural health nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0743	Sleep medicine nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0744	Surgical and critical care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0745	Surgical wound and reconstruction nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0746	Transplantation nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0747	Trauma and critical care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0748	Urgent care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0749	Urology nurse practitioner	Postdocs and NFRs only	719	Nursing
60.075	Women's health nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0751	Wound care nurse practitioner	Postdocs and NFRs only	719	Nursing
60.0799	Nurse practitioner, other	Postdocs and NFRs only	719	Nursing
60.0801	Pharmacy, general	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0802	Combined pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0803	Ambulatory care pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0804	Cardiology pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0805	Clinical pharmacogenomics pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0806	Community/ community-based pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0807	Corporate pharmacy leadership	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0808	Critical care pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0809	Drug information pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.081	Emergency medicine pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0811	Family medicine pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0812	Geriatric pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0813	Health system medication management pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0814	Health system pharmacy administration and leadership	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0815	Infectious diseases pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0816	Internal medicine pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0817	Investigational drugs and pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0818	Managed care pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0819	Medication systems and operations pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.082	Medication-use safety pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0821	Neonatal pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0822	Nephrology pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
60.0823	Neurology pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0824	Nuclear pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0825	Nutrition support pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0826	Oncology pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0827	Palliative care/ pain management pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0828	Pediatric pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0829	Pharmacotherapy pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.083	Pharmacy informatics pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0831	Psychiatric pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0832	Transplantation pharmacy	Postdocs and NFRs only	720	Pharmaceutical sciences
60.0899	Pharmacy research, other	Postdocs and NFRs only	720	Pharmaceutical sciences
61.0101	Combined medical, general	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0102	Diagnostic radiology/ nuclear medicine combined	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.0103	Emergency medicine/ anesthesiology combined	Postdocs and NFRs only	701	Anesthesiology
61.0104	Family medicine/ emergency medicine combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0105	Family medicine/ osteopathic neuromusculoskeletal medicine combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0106	Family medicine/ preventive medicine combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0107	Family medicine/ psychiatry combined	Postdocs and NFRs only	713	Psychiatry
61.0108	Internal medicine/ anesthesiology combined	Postdocs and NFRs only	701	Anesthesiology
61.0109	Internal medicine/ dermatology combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.011	Internal medicine/ emergency medicine combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0111	Internal medicine/ emergency medicine/ critical care medicine combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0112	Internal medicine/ family medicine combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0113	Internal medicine/ medical genetics and genomics combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0114	Internal medicine/ neurology combined	Postdocs and NFRs only	707	Neurology
61.0115	Internal medicine/ pediatrics combined	Postdocs and NFRs only	711	Pediatrics
61.0116	Internal medicine/ preventive medicine combined	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0117	Internal medicine/ psychiatry combined	Postdocs and NFRs only	713	Psychiatry
61.0118	Medical genetics and genomics/ maternal-fetal medicine combined	Postdocs and NFRs only	708	Obstetrics and gynecology
61.0119	Pediatrics/ anesthesiology combined	Postdocs and NFRs only	701	Anesthesiology
61.012	Pediatrics/ emergency medicine combined	Postdocs and NFRs only	711	Pediatrics
61.0121	Pediatrics/ medical genetics and genomics combined	Postdocs and NFRs only	711	Pediatrics
61.0122	Pediatrics/ physical medicine & rehabilitation combined	Postdocs and NFRs only	711	Pediatrics
61.0123	Pediatrics/ psychology/ child-adolescent psychology combined	Postdocs and NFRs only	711	Pediatrics
61.0124	Psychiatry/ neurology combined	Postdocs and NFRs only	713	Psychiatry
61.0125	Reproductive endocrinology and infertility/ medical genetics and genomics combined	Postdocs and NFRs only	708	Obstetrics and gynecology

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
61.0199	Combined medical, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0204	Critical care medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0212	Geriatric medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0214	Surgery of the hand	Postdocs and NFRs only	716	Surgery
61.0215	Health policy (medical/ clinical)	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0216	Hospice and palliative medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0218	Integrative medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0219	Medical education	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.022	Medical toxicology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0222	Neuromuscular medicine	Postdocs and NFRs only	707	Neurology
61.0224	Pain medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0225	Simulation	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0226	Sleep medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0228	Sports medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0229	Telemedicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.023	Undersea and hyperbaric medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0232	Wilderness medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0234	Women's health	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0299	Multiple-pathway medical, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0301	Allergy and immunology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0399	Allergy and immunology, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0401	Anesthesiology	Postdocs and NFRs only	701	Anesthesiology
61.0499	Anesthesiology, other	Postdocs and NFRs only	701	Anesthesiology
61.0501	Dermatology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0502	Dermatopathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0504	Pediatric dermatology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0599	Dermatology, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0601	Emergency medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0602	Disaster medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0603	Emergency medical services	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0699	Emergency medicine, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0701	Family medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0799	Family medicine, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0801	Internal medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0804	Cardiovascular disease	Postdocs and NFRs only	702	Cardiology and cardiovascular disease
61.0805	Clinical cardiac electrophysiology	Postdocs and NFRs only	702	Cardiology and cardiovascular disease

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
61.0806	Endocrinology, diabetes and metabolism	Postdocs and NFRs only	704	Endocrinology, diabetes, and metabolism
61.0807	Gastroenterology	Postdocs and NFRs only	705	Gastroenterology
61.0808	Hematology	Postdocs and NFRs only	706	Hematology
61.0809	Hematology-oncology	Postdocs and NFRs only	703	Oncology and cancer research
61.081	Infectious disease	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0811	Interventional cardiology	Postdocs and NFRs only	702	Cardiology and cardiovascular disease
61.0812	Nephrology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0813	Medical oncology	Postdocs and NFRs only	703	Oncology and cancer research
61.0814	Pulmonary disease	Postdocs and NFRs only	714	Pulmonary disease
61.0816	Rheumatology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0818	Transplant hepatology	Postdocs and NFRs only	705	Gastroenterology
61.0899	Internal medicine, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0901	Clinical biochemical genetics	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0902	Clinical genetics	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0903	Clinical molecular genetics	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0904	Medical biochemical genetics	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.0999	Medical genetics and genomics, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1001	Neurological surgery	Postdocs and NFRs only	707	Neurology
61.1099	Neurological surgery, other	Postdocs and NFRs only	707	Neurology
61.1101	Neurology	Postdocs and NFRs only	707	Neurology
61.1102	Child neurology	Postdocs and NFRs only	707	Neurology
61.1103	Clinical neurophysiology	Postdocs and NFRs only	707	Neurology
61.1104	Epilepsy	Postdocs and NFRs only	707	Neurology
61.1105	Headache medicine	Postdocs and NFRs only	707	Neurology
61.1106	Neurodevelopmental disabilities	Postdocs and NFRs only	707	Neurology
61.1107	Vascular neurology	Postdocs and NFRs only	707	Neurology
61.1199	Neurology, other	Postdocs and NFRs only	707	Neurology
61.1201	Nuclear medicine	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.1299	Nuclear medicine, other	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.1301	Obstetrics and gynecology	Postdocs and NFRs only	708	Obstetrics and gynecology
61.1303	Gynecologic oncology	Postdocs and NFRs only	708	Obstetrics and gynecology
61.1304	Maternal and fetal medicine	Postdocs and NFRs only	708	Obstetrics and gynecology
61.1305	Reproductive endocrinology/ infertility	Postdocs and NFRs only	708	Obstetrics and gynecology
61.1399	Obstetrics and gynecology, other	Postdocs and NFRs only	708	Obstetrics and gynecology
61.1401	Ophthalmology	Postdocs and NFRs only	709	Ophthalmology
61.1499	Ophthalmology, other	Postdocs and NFRs only	709	Ophthalmology

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
61.1501	Orthopedic surgery	Postdocs and NFRs only	716	Surgery
61.1504	Musculoskeletal oncology	Postdocs and NFRs only	716	Surgery
61.1505	Orthopedic sports medicine	Postdocs and NFRs only	716	Surgery
61.1506	Orthopedic surgery of the spine	Postdocs and NFRs only	716	Surgery
61.1507	Pediatric orthopedics	Postdocs and NFRs only	716	Surgery
61.1599	Orthopedic surgery, other	Postdocs and NFRs only	716	Surgery
61.1601	Osteopathic neuromusculoskeletal medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1699	Osteopathic medicine, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1701	Otolaryngology	Postdocs and NFRs only	710	Otorhinolaryngology
61.1702	Neurotology	Postdocs and NFRs only	710	Otorhinolaryngology
61.1703	Pediatric otolaryngology	Postdocs and NFRs only	710	Otorhinolaryngology
61.1799	Otolaryngology, other	Postdocs and NFRs only	710	Otorhinolaryngology
61.1801	Pathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1804	Blood banking/ transfusion medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1805	Chemical pathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1806	Cytopathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1807	Forensic pathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1808	Hematological pathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1809	Immunopathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.181	Laboratory medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1811	Medical microbiology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1812	Molecular genetic pathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1813	Neuropathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1814	Pediatric pathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1815	Radioisotopic pathology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1899	Pathology, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.1901	Pediatrics	Postdocs and NFRs only	711	Pediatrics
61.1902	Adolescent medicine	Postdocs and NFRs only	711	Pediatrics
61.1903	Child abuse pediatrics	Postdocs and NFRs only	711	Pediatrics
61.1904	Developmental-behavioral pediatrics	Postdocs and NFRs only	711	Pediatrics
61.1905	Neonatal-perinatal medicine	Postdocs and NFRs only	711	Pediatrics
61.1906	Pediatric cardiology	Postdocs and NFRs only	711	Pediatrics
61.1907	Pediatric critical care medicine	Postdocs and NFRs only	711	Pediatrics
61.1908	Pediatric emergency medicine	Postdocs and NFRs only	711	Pediatrics
61.1909	Pediatric endocrinology	Postdocs and NFRs only	711	Pediatrics
61.191	Pediatric gastroenterology	Postdocs and NFRs only	711	Pediatrics

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
61.1911	Pediatric hematology-oncology	Postdocs and NFRs only	711	Pediatrics
61.1912	Pediatric infectious diseases	Postdocs and NFRs only	711	Pediatrics
61.1913	Pediatric nephrology	Postdocs and NFRs only	711	Pediatrics
61.1914	Pediatric pulmonology	Postdocs and NFRs only	711	Pediatrics
61.1915	Pediatric rheumatology	Postdocs and NFRs only	711	Pediatrics
61.1917	Pediatric transplant hepatology	Postdocs and NFRs only	711	Pediatrics
61.1999	Pediatrics, other	Postdocs and NFRs only	711	Pediatrics
61.2001	Physical medicine and rehabilitation	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2002	Spinal cord injury medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2003	Pediatric rehabilitation medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2099	Physical medicine and rehabilitation, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2101	Plastic surgery	Postdocs and NFRs only	716	Surgery
61.2103	Plastic surgery within the head and neck	Postdocs and NFRs only	716	Surgery
61.2199	Plastic surgery, other	Postdocs and NFRs only	716	Surgery
61.2201	Podiatric medicine and surgery	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2299	Podiatric medicine, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2301	Public health and general preventive medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2302	Aerospace medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2303	Occupational medicine	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2399	Preventive medicine, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2401	Psychiatry	Postdocs and NFRs only	713	Psychiatry
61.2402	Addiction psychiatry	Postdocs and NFRs only	713	Psychiatry
61.2403	Child and adolescent psychiatry	Postdocs and NFRs only	713	Psychiatry
61.2404	Psychosomatic medicine	Postdocs and NFRs only	713	Psychiatry
61.2405	Forensic psychiatry	Postdocs and NFRs only	713	Psychiatry
61.2406	Geriatric psychiatry	Postdocs and NFRs only	713	Psychiatry
61.2499	Psychiatry, other	Postdocs and NFRs only	713	Psychiatry
61.2501	Radiation oncology	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2599	Radiation oncology, other	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2601	Diagnostic radiology	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2604	Diagnostic radiologic physics	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2605	Medical nuclear physics	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2607	Neuroradiology	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2608	Nuclear radiology	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2609	Pediatric radiology	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.261	Radiologic physics	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine

TABLE A-16

Crosswalk between 2020 Classification of Instructional Programs codes and 2023 GSS codes

(Crosswalk)

CIP code	CIP program title	Degree exclusions	GSS code	GSS field name
61.2611	Therapeutic radiologic physics	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2612	Vascular and interventional radiology	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2699	Radiology, other	Postdocs and NFRs only	715	Radiological sciences and nuclear medicine
61.2701	General surgery	Postdocs and NFRs only	716	Surgery
61.2702	Colon and rectal surgery	Postdocs and NFRs only	716	Surgery
61.2703	Complex general surgical oncology	Postdocs and NFRs only	716	Surgery
61.2704	Congenital cardiac surgery	Postdocs and NFRs only	716	Surgery
61.2705	Pediatric surgery	Postdocs and NFRs only	716	Surgery
61.2706	Surgical critical care	Postdocs and NFRs only	716	Surgery
61.2707	Thoracic surgery	Postdocs and NFRs only	716	Surgery
61.2709	Vascular surgery	Postdocs and NFRs only	716	Surgery
61.2799	Surgery, other	Postdocs and NFRs only	716	Surgery
61.2801	Urology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2802	Pediatric urology	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.2899	Urology, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified
61.9999	Medical, other	Postdocs and NFRs only	717	Clinical medicine, not elsewhere classified

AuD = Doctor of Audiology; CIP = Classification of Instructional Programs; DArch = Doctor of Architecture; DCS = Doctor of Computer Science; DDS = Doctor of Dental Surgery; DED = Doctor of Education; DN = Doctor of Naprapathy; DNP = Doctor of Nursing Practice; DO = Doctor of Osteopathic Medicine; DPM = Doctor of Podiatric Medicine; DPT = Doctor of Physical Therapy; DScPT = Doctor of Science in Physical Therapy; DVM = Doctor of Veterinary Medicine; GSS = Survey of Graduate Students and Postdoctorates in Science and Engineering; JD = Juris Doctor; MArch = Master of Architecture; MBA = Master of Business Administration; MD = Doctor of Medicine; MHSA = Master of Health Services Administration; MLA = Master of Landscape Architecture; ND = Doctor of Naturopathic Medicine; NFR = nonfaculty researcher; OD = Doctor of Optometry; OTD = Doctor of Occupational Therapy; PharmD = Doctor of Pharmacy; PsyD = Doctor of Psychology; SLPD = Doctor of Speech-Language Pathology.

Note(s):

Certificate programs or units are not included if they only award professional degrees, such as AuD, DArch, DCS, DDS, DED, DN, DNP, DO, DPM, DPT, DScPT, DVM, JD, MArch, MD, MLA, ND, OD, OTD, PharmD, PsyD, or SLPD. CIP codes in the 60 and 61 series are designated for medical residency programs. For GSS, these CIP medical residency program titles have been modified to allow reporting of eligible postdoctoral appointees (postdocs) and other doctorate-holding NFRs in these medical fields.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

TABLE A-17

Mapping of 2023 GSS codes and fields

(Crosswalk)

Broad field	GSS code (collected)	Detailed field (collected)	GSS code (reported)	GSS field name (in data and tables)	Exclusions
Agricultural and veterinary sciences	501	Agricultural sciences	501	Agricultural sciences	
	502	Veterinary biomedical and clinical sciences	502	Veterinary biomedical and clinical sciences	DVM
Biological and biomedical sciences	602	Biochemistry	602	Biochemistry	
	603	Biology	603	Biology	
	623	Biomedical sciences	623	Biomedical sciences	
	605	Biophysics	605	Biophysics	
	618	Biostatistics and bioinformatics	618	Biostatistics and bioinformatics	
	606	Botany and plant biology	606	Botany and plant biology	
	624	Biotechnology	624	Biotechnology	
	619	Cell, cellular biology, and anatomical sciences	619	Cell, cellular biology, and anatomical sciences	
	620	Ecology and population biology	620	Ecology and population biology	
	621	Epidemiology	621	Epidemiology	
	610	Genetics	610	Genetics	
	611	Microbiological sciences and immunology	611	Microbiological sciences and immunology	
	622	Molecular biology	622	Molecular biology	
	950	Neurobiology and neuroscience	626	Neurobiology and neuroscience	
	612	Nutrition science	612	Nutrition science	
	613	Pathology and experimental pathology	613	Pathology and experimental pathology	
	614	Pharmacology and toxicology	614	Pharmacology and toxicology	
	615	Physiology	615	Physiology	
	616	Zoology and animal biology	616	Zoology and animal biology	
	617	Biological and biomedical sciences nec	617	Biological and biomedical sciences nec	
Computer and information sciences	416	Artificial intelligence, informatics and computer and information science topics	416	Artificial intelligence, informatics and computer and information science topics	Exclude DCS
	411	Computer and information science	411	Computer and information science	Exclude DCS
	413	Computer and information systems security	413	Computer and information systems security	Exclude DCS
	410	Computer science	410	Computer science	Exclude DCS
	415	Information science and studies	415	Information science and studies	Exclude DCS
	414	Information technology	414	Information technology	Exclude DCS
	412	Computer and information science nec	412	Computer and information science nec	Exclude DCS
Geoscience, atmospheric, and ocean sciences	301	Atmospheric sciences and meteorology	301	Atmospheric sciences and meteorology	
	302	Geological and earth sciences	302	Geological and earth sciences	
	303	Ocean and marine sciences	303	Ocean and marine sciences	
	304	Geoscience, atmospheric, and ocean sciences nec	304	Geoscience, atmospheric, and ocean sciences nec	Postdocs and NFRs only
Mathematics and statistics	404	Applied mathematics	404	Applied mathematics	
	405	Mathematics	405	Mathematics	
	403	Statistics	403	Statistics	

TABLE A-17

Mapping of 2023 GSS codes and fields

(Crosswalk)

Broad field	GSS code (collected)	Detailed field (collected)	GSS code (reported)	GSS field name (in data and tables)	Exclusions
Multidisciplinary and interdisciplinary studies	982	Biological and physical sciences	982	Biological and physical sciences	
	981	Computational science	981	Computational science	
	984	Data science and data analytics	984	Data science and data analytics	
	983	International and global studies	983	International and global studies	
	980	Multidisciplinary and interdisciplinary studies nec	980	Multidisciplinary and interdisciplinary studies nec	
Natural resources and conservation	510	Environmental science and studies	510	Environmental science and studies	
	511	Forestry, natural resources and conservation	511	Forestry, natural resources and conservation	
Physical sciences	201	Astronomy and astrophysics	201	Astronomy and astrophysics	
	202	Chemistry	202	Chemistry	
	205	Materials sciences	205	Materials sciences	
	203	Physics	203	Physics	
	204	Physical sciences nec	204	Physical sciences nec	
Psychology	804	Applied psychology	804	Applied psychology	
	803	Clinical psychology	803	Clinical psychology	
	806	Counseling psychology	806	Counseling psychology	
	915	Human development	815	Human development	
	801	Psychology, general	801	Psychology, general	
	805	Research and experimental psychology	805	Research and experimental psychology	
Social sciences	901	Agricultural and natural resource economics	901	Agricultural and natural resource economics	
	902	Anthropology	902	Anthropology	
	916	Area, ethnic, cultural, gender, and group studies	916	Area, ethnic, cultural, gender, and group studies	
	911	Criminal justice and safety studies	911	Criminal justice and safety studies	
	917	Criminology	917	Criminology	
	903	Economics (except agricultural and natural resource)	903	Economics (except agricultural and natural resource)	
	904	Geography and cartography	904	Geography and cartography	
	912	International relations and national security studies	912	International relations and national security studies	
	906	Linguistics	906	Linguistics	
	907	Political science and government	907	Political science and government	
	914	Public policy analysis	914	Public policy analysis	
	908	Sociology and population studies	908	Sociology and population studies	
	918	Urban studies and affairs	918	Urban studies and affairs	
	910	Social sciences nec	919	Social sciences, other	
	905	History and philosophy of science and technology	919	Social sciences, other	
	Aerospace, aeronautical, and astronautical engineering	101	Aerospace, aeronautical, and astronautical engineering	101	Aerospace, aeronautical, and astronautical engineering
Biological, biomedical, and biosystems engineering	103	Bioengineering and biomedical engineering	120	Biological, biomedical, and biosystems engineering	
	115	Biological and biosystems engineering	120	Biological, biomedical, and biosystems engineering	

TABLE A-17

Mapping of 2023 GSS codes and fields

(Crosswalk)

Broad field	GSS code (collected)	Detailed field (collected)	GSS code (reported)	GSS field name (in data and tables)	Exclusions	
Chemical, petroleum, and chemical-related engineering	104	Chemical engineering	104	Chemical engineering		
	113	Petroleum engineering	113	Petroleum engineering		
Civil, environmental, transportation and related engineering fields	105	Civil engineering	105	Civil engineering		
	117	Architectural, environmental, construction and surveying engineering	117	Architectural, environmental, construction and surveying engineering		
Electrical, electronics, communications and computer engineering	118	Computer engineering	118	Computer engineering		
	106	Electrical, electronics, and communications engineering	106	Electrical, electronics, and communications engineering		
Industrial, manufacturing, systems engineering and operations research	108	Industrial and manufacturing engineering	108	Industrial and manufacturing engineering		
	119	Systems engineering and operations research	119	Systems engineering and operations research		
Mechanical engineering	109	Mechanical engineering	109	Mechanical engineering		
Metallurgical, mining, materials and related engineering fields	110	Metallurgical and materials engineering	121	Metallurgical, mining, materials and related engineering fields		
	111	Mining engineering	121	Metallurgical, mining, materials and related engineering fields		
Engineering, other	102	Agricultural engineering	102	Agricultural engineering		
	107	Engineering mechanics, physics, and science	107	Engineering mechanics, physics, and science		
	112	Nuclear engineering	112	Nuclear engineering		
	114	Engineering nec	122	Engineering, other		
	116	Nanotechnology	122	Engineering, other		
	701	Anesthesiology	701	Anesthesiology	Postdocs and NFRs only	
Clinical medicine	702	Cardiology and cardiovascular disease	702	Cardiology and cardiovascular disease	Postdocs and NFRs only	
	704	Endocrinology, diabetes, and metabolism	704	Endocrinology, diabetes, and metabolism	Postdocs and NFRs only	
	705	Gastroenterology	705	Gastroenterology	Postdocs and NFRs only	
	706	Hematology	706	Hematology	Postdocs and NFRs only	
	725	Clinical and medical laboratory science	729	Medical clinical sciences and clinical and medical laboratory sciences		
	730	Medical clinical sciences	729	Medical clinical sciences and clinical and medical laboratory sciences		
	707	Neurology and neurosurgery	707	Neurology and neurosurgery	Postdocs and NFRs only	
	708	Obstetrics and gynecology	708	Obstetrics and gynecology	Postdocs and NFRs only	
	703	Oncology and cancer research	703	Oncology and cancer research	Postdocs and NFRs only	
	709	Ophthalmology	709	Ophthalmology	Postdocs and NFRs only	
	710	Otorhinolaryngology	710	Otorhinolaryngology	Postdocs and NFRs only	
	711	Pediatrics	711	Pediatrics	Postdocs and NFRs only	
	712	Public health	712	Public health		
	713	Psychiatry	713	Psychiatry	Postdocs and NFRs only	
	714	Pulmonary disease	714	Pulmonary disease	Postdocs and NFRs only	
	715	Radiological sciences	715	Radiological sciences	Postdocs and NFRs only	
	716	Surgery	716	Surgery	Postdocs and NFRs only	
	717	Clinical medicine nec	717	Clinical medicine nec	Postdocs and NFRs only	
	Other health	723	Communication disorders sciences	723	Communication disorders sciences	Exclude AuD

TABLE A-17

Mapping of 2023 GSS codes and fields

(Crosswalk)

Broad field	GSS code (collected)	Detailed field (collected)	GSS code (reported)	GSS field name (in data and tables)	Exclusions
	718	Dental sciences	718	Dental sciences	Exclude DDS
	724	Kinesiology and exercise science	724	Kinesiology and exercise science	Exclude DPT, DScPT, and OTD
	719	Nursing science	719	Nursing science	PhD, postdocs, and NFRs only
	720	Pharmaceutical sciences	720	Pharmaceutical sciences	Exclude PharmD
	722	Other health nec	722	Health-related nec	Exclude DPT, DScPT and OTD

AuD = Doctor of Audiology; DCS = Doctor of Computer Science; DDS = Doctor of Dental Surgery; DPT = Doctor of Physical Therapy; DScPT = Doctor of Science in Physical Therapy; DVM = Doctor of Veterinary Medicine; GSS = Survey of Graduate Students and Postdoctorates in Science and Engineering; NFR = nonfaculty researcher; nec = not elsewhere classified; OTD = Doctor of Occupational Therapy; PharmD = Doctor of Pharmacy; PhD = Doctor of Philosophy.

Source(s):

National Center for Science and Engineering Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering, 2023.

Acknowledgments and Suggested Citation

Acknowledgments

Michael Yamaner of the National Center for Science and Engineering Statistics (NCSES) developed and coordinated this report under the guidance of Amber Levanon Seligson, NCSES Program Director, and the leadership of Emilda B. Rivers, NCSES Director; Christina Freyman, NCSES Deputy Director; and John Finamore, NCSES Chief Statistician. Wan-Ying Chang (NCSES) reviewed the report. Under contract to NCSES, RTI International compiled the tables in this report.

NCSES thanks the institutions and coordinators for their participation in the Survey of Graduate Students and Postdoctorates in Science and Engineering.

Suggested Citation

National Center for Science and Engineering Statistics (NCSES). 2025. *Survey of Graduate Students and Postdoctorates in Science and Engineering: Fall 2023*. NSF 25-317. Alexandria, VA: U.S. National Science Foundation. Available at <https://nces.nsf.gov/surveys/graduate-students-postdoctorates-s-e/2023>.

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